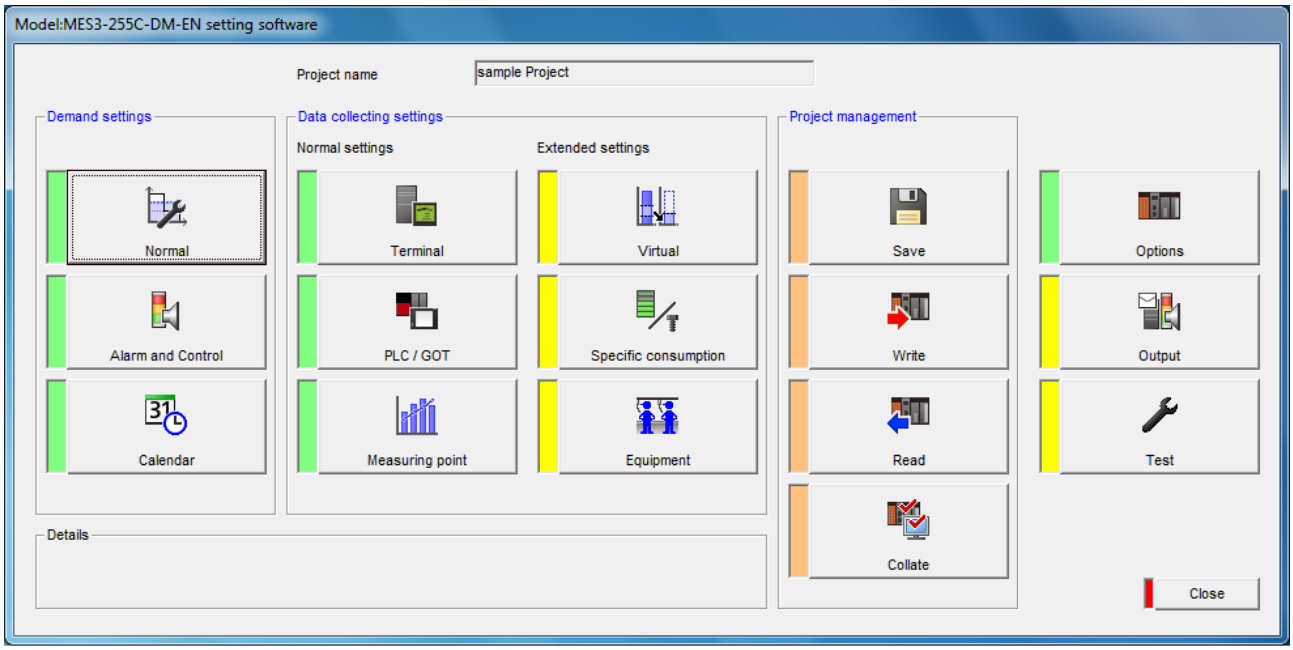
Mitsubishi Energy Saving Data Collecting Server EcoWebServerIII

Model name

MES3-255C-EN/MES3-255C-DM-EN

Instruction Manual – Setting



● **Be sure to read this manual before using the equipment.**
Please deliver this manual to the end user.

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1. Preface

Thank you for purchasing Mitsubishi's Energy Saving Data Collecting Server (hereinafter, EcoWebServerIII). This instruction manual describes how to manage, set up, and operate projects to operate EcoWebServerIII and how to operate the EcoWebServerIII setting software (hereinafter, "setting software") for the maintenance of EcoWebServerIII. This instruction manual assumes that the reader has knowledge of personal computers, networks, and various types of servers and basic knowledge of electric equipment. Please read it carefully, and use the product properly.
Keep this instruction manual in an accessible place for future reference whenever needed.
Make sure it is delivered to the end user.
For more information on the display function of EcoWebServerIII, see "**Instruction Manual – Operating**".
For information on how to handle the main unit of EcoWebServerIII, see "**Instruction Manual – Hardware**".

1.1. General notes

1.1.1. Warranty

- Please contact your nearest Mitsubishi Sales Office or dealer for technical inquiries regarding the product.
- This instruction manual and equipment have undergone strict quality control and product inspections prior to shipment. However, if any problems occur as a result of the manufacturing of this equipment or instruction manual, a replacement will be provided. Please contact your dealer in this case. Note that this does not apply to faults or damage resulting from force majeure or improper usage, etc.
- Mitsubishi shall not be held liable for any trouble in the user or third party's system, legal problems, faults resulting from improper use of equipment, faults occurring during the use of this equipment, or any damage caused by other faults.
- The charge-free warranty period for the product shall be the shorter period either of one year from the date of your purchase or the date when the product is delivered to your specified delivery location or 18 months from the time of the shipment from our factories (counted from the date of manufacture).
  However, the charge-free warranty shall not apply to the following cases even during the charge-free warranty period:
  (1) When the cause is an improper usage
  (2) When the cause is an improper operation

  The charge-free warranty becomes invalid at the expiration of the charge-free warranty period.
- The charge-free warranty term for repaired parts shall not be extended.

1.1.2. Trademarks

- Microsoft®, Windows®, Windows® XP,-Windows Vista®, Windows®7, Windows®8, and Internet Explorer® are registered trademarks or trademarks and products of Microsoft Corporation in the United States and/or other countries.
- Java all Java-based trademarks and logos are registered trademarks of Oracle Corporation and its affiliated companies in the United States and/or other countries.
- CompactFlash™ is trademarks of SanDisk Corporation.
- Ethernet is a registered trademark of Fuji Xerox Co., Ltd.
- EcoWebServer is a registered trademark of Mitsubishi Electric Corporation.
- Other company names and product names in the manual are registered trademarks or trademarks of their respective owners.

1.2. Safety precautions

1.2.1. Storage

When storing the CD-ROM, avoid the following places.
Failure to follow the instruction may cause a read error.

- Ambient temperature exceeds the specified temperature range (+5°C to +45°C).
- Relative humidity exceeds 30 to 80% RH or condensation is observed.
- Altitude exceeds 1000 m.
- Dust, corrosive gas, saline, and oil smoke exist.
- Frequent vibration or impact exists.
- Exposed to rain fall, water drop, or direct sunlight or near heaters.
- Metal pieces or conductive materials blow.
- Under strong electromagnetic field or noise.

1.2.2. Other notes

See the instruction manual of EcoWebServerIII−Hardware.

1.3. Precautions for use

Before configuring data, particular attention must be paid to the following points:

- Use the setting software after closing any other applications that are running.
  If running in parallel with other applications, the setting software may not operate properly.
- If you have any questions about the installation, setting, and other technical matters of browsers and JavaVM (Java Virtual Machine) on PCs, contact your network administrator (or appropriate divisions).
- If you have any questions about the installation, setting, and other technical matters of various servers, including the SMTP (mail-sending) server and FTP (file) server, contact your network administrator (or appropriate divisions) or the manufacturer.
  We don't offer technical support for the above.
- When having changed the display setting of the measuring point names and other settings, be sure to close the currently displayed Web browser and restart it. Otherwise, the change might not be updated due to the cache function of the web browser.
- If there is an error in the model information on the terminal registration dialog box, the number of digits after decimal point of the measured data may be incorrect, or a measurement error may occur.
  Be sure to **specify the correct model information**.
- The monitoring of the upper and lower limits is performed every 10 seconds; therefore, some abnormalities in the upper and lower limits may not be detected.
  Do not use the unit for the monitoring of the measured data of urgency.
  Otherwise, an accident may occur. In such cases, we are not responsible for any accidents.
- The monitoring of the operation statuses is performed every 10 seconds; therefore, some statuses may not be detected.
  Do not use the unit for the monitoring of alarms of urgency.
  Otherwise, an accident may occur. In such cases, we are not responsible for any accidents.
- The monitoring of the target Specific consumptions is performed every 1 hour; therefore, the detection may be delayed.
  Do not use the unit for the monitoring of the Specific consumption data of urgency.
  Otherwise, an accident may occur. In such cases, we are not responsible for any accidents.
- The monitoring of the energy planned values is performed every 1 day; therefore, the detection may be delayed.
  Do not use the unit for the monitoring of the measured data of urgency.

Otherwise, an accident may occur. In such cases, we are not responsible for any accidents.

- As for the mail delivering through the monitoring notification function, the mail reception may be delayed according to environments of your SMTP server, network, and mail client.

Do not use the unit for the notifications of urgency.

Otherwise, an accident may occur. In such cases, we are not responsible for any accidents.

- The contact output of the monitoring statuses is performed every 10 seconds; therefore, the output may be delayed from the satisfaction of the contact output condition.

Do not use the unit for the contact output of the monitoring of urgency.

Otherwise, an accident may occur. In such cases, we are not responsible for any accidents

- **Do not perform the writing of projects concurrently from multiple client PCs** via a LAN.

Otherwise, the writing may not be performed properly, and EcoWebServerIII may not be launched.

- If the demand is not set correctly, a correct measurement may not be possible, the load may be inadvertently cut off, and it may not be able to cut off the load.

Set the demand correctly.

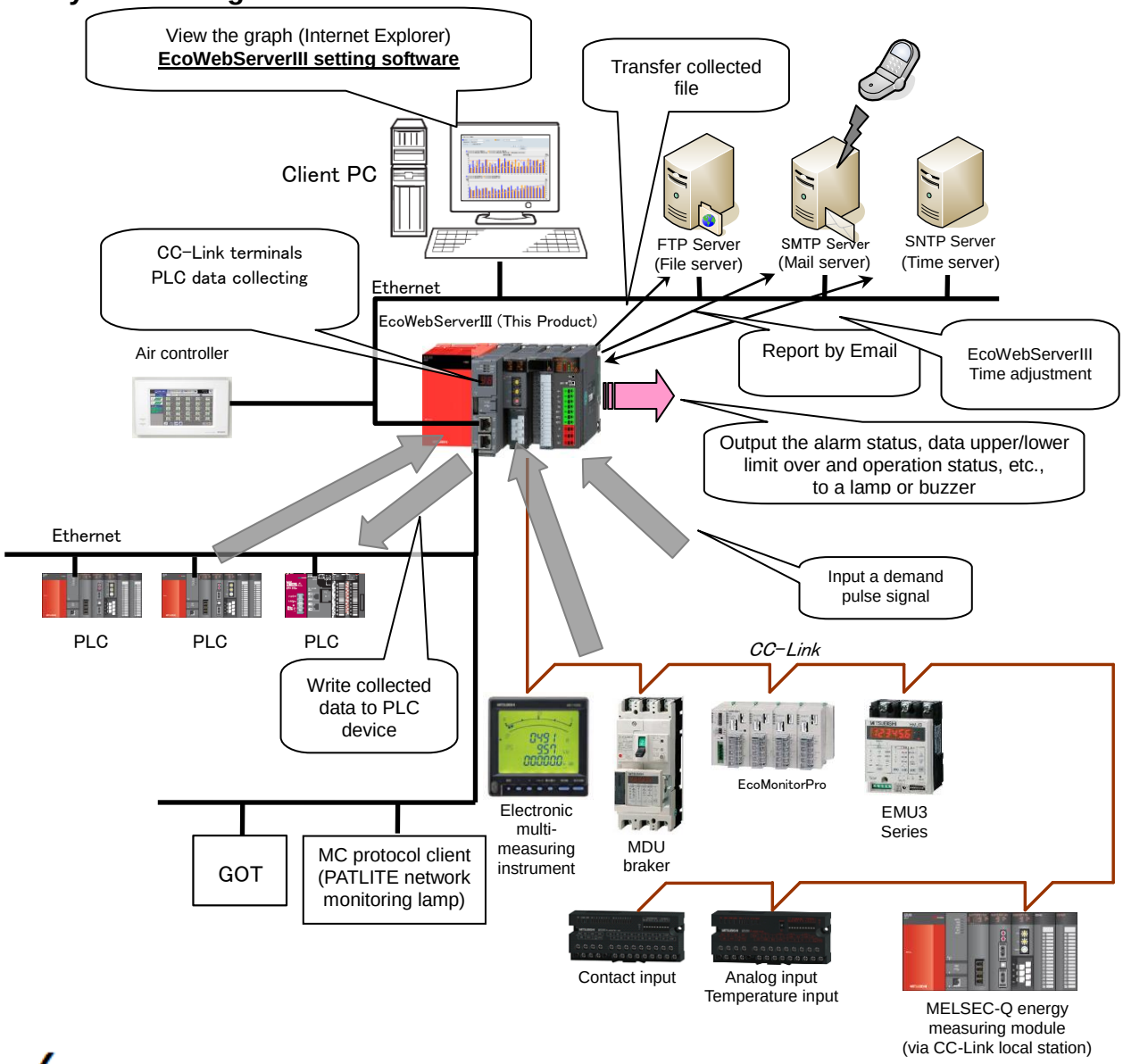
- When an air-conditioning system, etc., is set as the demand control load, if the circuit is configured to directly cut off the outdoor unit's main power or the compressor's main power, a system fault could occur, or the product quality or life may be lost depending on the model.
  Consult with the air-conditioner maker for details on compatibility of this product with the air-conditioning system in use.

1.4. Main features and specifications

1.4.1. Main features of the EcoWebServerIII setting software

- The setting software can manage the EcoWebServerIII projects of up to 50 units from a PC connected to a LAN.
- The setting software can easily configure and modify projects.
- The setting software can perform various maintenance functions, including moving the data files stored in EcoWebServerIII to a PC.

1.4.2. System configuration



The figure above is a system configuration (CC-Link communication, demand control) example
When using CC-Link communication device without demand control function, note the following points are different from the above figure.

- Demand control unit is not attached to the EcoWebServerIII.
- Shape of the power supply unit of EcoWebServerIII is different
- There is no coordination function with air conditioning controller.

1.4.3. Specifications

The display names and description of the functions of the setting software are as follows:

Name	Description of functions
Project management	
New registration of project	Creates a new project.
Deletion of project	Deletes a project.
Change of project	Modifies the content of a project.
Copy of project	Copies a project.
Backup of project	Backs up project information on an external memory.
Restoration of project	Restores project information from an external memory.
Project settings	
Demand settings	Configures settings for demand control.
Normal	Configures basic settings for demand control.
Alarm and control	Configures the demand alarm and demand control settings.
Calendar	Configures the demand control schedule.
Data collecting settings [Normal settings]	Configures the settings for collecting measuring data.
Terminals	Displays a list of registered CC-Link terminals.
Terminal	Registers the CC-Link terminal.
PLC / GOT	Displays a list of PLCs connected to the registered Ethernet.
Log in PLC, GOT	Registers the PLC/GOT connected to Ethernet with CH2.
Measuring point	Displays a list of CC-Link measuring points.
Measuring point	Registers the CC-Link terminal or device data as a measuring point.
Measuring point group set	Sets the measuring point group.
Data collecting settings [Extended settings]	Configures the settings for the measuring data collection advanced functions.
Virtual	Displays a list of virtual measuring points.
Virtual measuring point	Registers the virtual measuring points.
Specific consumption	Displays a list of specific consumption measuring points.
Specific consumption measuring point	Registers the specific consumption measuring point.
Selection of the measuring point	Selects the measuring point/virtual measuring point to be used in the specific consumption computation.
Equipment	Displays a list of equipment.
Equipment list	Registers a piece of equipment.
Equipment	Selects a measuring point/virtual measuring point to be used in the computation of equipment overall efficiency.
Registration of display measuring point	Registers a display measuring point of the equipment.
Equipment group list	Displays the list of equipment groups.
Resistration of equipment group	Registers a piece of equipment in an equipment group.
Project management	Saves, writes, reads, and checks a project.
Save	Saves the settings of a project.
Write	Writes the settings of a project onto EcoWebServerIII or a CompactFlash.
Read	Reads the settings of a project from EcoWebServerIII or a CompactFlash.
Collate	Check the settings of a project against EcoWebServerIII or a CompactFlash.

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Name	Description of functions
Options	Configures the settings of the unit.
IP address	Configures the settings of the IP address and the DNS server.
Time	Reads the time data, and configures the time setting.
Auto time adjustment	Configures the automatic time setting using the SNTP server.
Set logging time	Sets the measuring point data logging date and time.
Password	Changes the login ID and password.
For maintenance	Changes the maintenance loginID and password.
For getting data	Changes the data acquisition login ID and password.
For system management	Changes the system administration login ID and password.
Output	Configures the settings related to collaboration with external devices.
Output settings	Displays the list of output groups.
Registration of the data output group	Registers the output groups.
Data output set(Demand control)	Sets the demand control function's data output destination.
Contact output	Displays a list of contact output settings, and sets the number of contact output points.
Registration of contact output condition	Registers the contact output conditions.
Mail notification settings	Configures the mail notification settings.
Set SMTP server	Configures the mail notification SMTP server.
Demand notification	Configures the demand control and notification settings.
Error notification	Configures the unit error notification.
Initial condition 1	Configures the setting of notifications of launch, memory card errors and measurement error.
Initial condition 2	Configures the setting of notifications of launch transfer errors, auto time setting errors, and battery errors.
Initial condition 3	Configures the setting of notifications of launch data output errors.
Regular report	Displays the list of regular report settings.
Registration of regular report	Registers the regular report settings.
Upper and lower limit monitoring	Displays the list of upper/lower limit monitoring and notification
Upper and lower limit monitoring notification registration	Registers an upper and lower limit monitoring and notification.
Operation status monitoring	Displays a list of operating status monitoring and notification settings.
Registration of operating status monitoring notification	Registers the operating status monitoring notifications.
Specific consumption target value monitoring	Displays a list of specific consumption target value monitoring and notification settings.
Registration of specific consumption target value monitoring notification	Registers the specific consumption target value.
Energy planning value monitoring	Displays a list of energy plan value monitoring and notification settings.
Registration of energy planning value monitoring notification	Registers the energy plan value monitoring settings.
File transfer	Configures the settings for file transfer.
Set FTP server	Configures the FTP server for file transfer.
Transmission destination folder set	Configures the transfer enable/disable state and transfer destination folder.
Energy saving cooperation settings	Configures the settings for energy saving collaboration.
Energy saving level monitor setting	Configures the energy saving monitoring and energy saving alarm.
Air-conditioner connection setting	Configures the connection with the air-conditioner controller.

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Name	Description of functions
Test	Configures the settings for each test and adjustment.
Confirm terminal connection	Configures the test for checking connection with the CC-Link terminal.
Confirm contact output	Performs a test on all contact outputs.
Confirm mail sending	Performs a test related to mail transmission
Demand notification	Performs a demand control and notification mail send test.
Error, regular notification	Performs a unit error and regular notification mail send test.
Measuring point data monitoring report	Preforms a measuring point data monitoring report mail send test.
Confirm file transfer	Performs a file transfer function test.
Confirm air-conditioner connection	Performs an air-controller connection test.
Integration value set	Sets the demand count value.
Collect data	Collects the logging data.
Delete data	Deletes the logging data.
Reset	Resets the unit.

<EcoWebServerIII and setting software specification>

Item			Specification	Remarks
Connection device	CC-Link terminal	Number of connection	Up to 42 Depending on the specification of CC-Link master unit *1	CC-Link communication module (EMU4-CM-C) is required, when use the EMU4-BD1-MB or EMU4-HD1-MB
		Model name/type name	EMU4-BD1-MB, EMU4-HD1-MB, EMU2-HM1-C, EMU2-RD1-C, EMU2-RD3-C, EMU2-RD5-C, EMU2-RD7-C, EMU2-RD2-C-4W, EMU2-RD4-C-4W, EMU3-DP1-C, EMU-C7P4-6-A(S), EMU-C7P4-6-A(P), MDU(WS), MDU(WS-V), AE-SW(BIF-CC), ME110SSR-C, ME110SSFL-C2H, ME110NSR-C, ME110NSFL-C, LG-5F-C, LG-10F-C, AJ65BT-68TD, AJ65BT-64RD3, AJ65BT-64AD, AJ65SBTB1-8D, AJ65SBTB1-16D, AJ65SBTB1-32D, AJ65SBTB1-16DT, AJ65SBTB1-32DT, QJ61BT11N, LCPU/LJ61BT11	
	PLC/GOT	Number of connection	32	Number that can be input and output number. Among them, data output is possible 8 only.
		Model name/type name	MELSEC PLC QCPU/LCPU/QnACPU, ACPU, AnACPU/AnUCPU, FXCPU(FX1x), FXCPU(FX3x) * FXCPU only serial connection GOT2000 series, GOT1000 series GT27/GT16/GT14/GT15	
Measuring target	CC-Link terminal		Current, voltage, electric power, electric energy, etc.(Differs for each model)	
	Demand control		Time(Year/month/day/hour/minute/second), Remaining time, Current demand (Whole day, time zone 1 – 10), Integrated value of consumption (Whole day, time zone 1 – 10), Predicted demand, Adjusted electrical power, Permissible power, Power limit	
	PLC/GOT		Bit device, word device (16/32 bit)	
Measuring points	All measuring points		Up to 255 points	
	measuring points of operation monitoring		Up to 32 points	Include in the number of all measuring point.
	Virtual measuring point		Up to 128 points	Not include in the number of all measuring point.
	Specific consumption measuring point		Up to 64 points	
	Equipment		Up to 42 points	
	Demand measuring point		2 points (Demand, Integrated value of consumption)	

*1 The following conditions.

Total number of stations

$a+b\times2+c\times3+d\times4\leq64$

a: Number of units occupying 1 station
b: Number of units occupying 2 stations
c: Number of units occupying 3 stations
d: Number of units occupying 2 stations

Number of connected units

$16\times A+54\times B+88\times C\leq2304$

A: Number of remote I/O station units≤64
B: Nubber of remote device station units≤42
C: Number of local station/intelligent device station units≤26

Item			Specification	Remarks
Contact output functions *2	Output destination		Internal output unit (up to 16 points), CC-Link Remote I/O (up to 32 points)	Up to 32 points if CC-Link remote I/O only
	Output points		Up to 32 points (Separate from all measuring points)	
		System	Up to 32 points	Include in the number of Output points.
		Upper/lower limit alarm	Up to 32 points	
		Energy plan value monitoring	Up to 32 points	
		Specific consumption target value monitoring	Up to 32 points	
		Operating status monitoring	Up to 32 points	
		Demand alarm	Up to 5 points	
		Demand control	Up to 12 points	
Energy saving collaboration functions	connection destination		Air-conditioner	Send the energy saving level and emergency stop order.
	Number of connection		Up to 10	
Data output functions (Up to 8 in PLC and GOT)	Output destination		Device of PLC/GOT	
	Output contents	Current data (Online measuring point)	Data for up to 8groups (255 points max.) can be outputted. Up to 32 points output per group (2 words device 1 point)	
		Measurement error information	Data for up to 8groups (255 points max.) can be outputted. Up to 32 points output per group (1 word device 16 points)	
		Demand information	Output the following data with 30 words (fixed) ・Control device (1 word device) ・Healty (1 word device) ・Current time (Year/month/day/hour/minute/second: Each 1 word device) ・Integrated value of consumption (2 words device) ・Current demand (2 words device) ・Predicted demand (2 words device) ・Adjusted electrical power (2 words device) ・Permissible power (2 words device) ・Previous demand (2 words device) ・Remaining time (1 word device) ・Alarm state (1 word device) ・Load control state(1 word device) ・Demand target value (2 words device) ・CVT ratio (2 words device) ・Alarm type (1 word device) ・Integrated value of consumption: Number of decimal digits (1 word device) ・Current demand: Number of decimal digits (1 word device)	Either of PLC and GOT can be output.
Logging function	Zoom		Collected at 1-minute or 5-minute intervals.	
	Daily		Collected on the hour or on the half-hour.	
	Monthly		Collected on the specified hour (at 00 minutes), once every day	
	Annual		Collected on the specified hour of the specified day (at 00 minutes), once every month	
	Demand(daily)		Collected on the specified demand time limit (15/30/60 minutes)	
	Demand(monthly)		Collected on the specified hour (at 00 minutes), once every day Demand value is Max. of a day	
	Demand(annual)		Collected on the specified hour of the specified day (at 00 minutes), once every month Demand value is Max. of a month	

Item			Specification		Remarks
Calculation function	Daily	Virtual calculation points *3	Computed from the data collected on the hour or on the half-hour	Four arithmetic computations with parentheses can be performed on up to 16 arithmetic elements. A virtual calculation point cannot be registered within another virtual calculation point. (Only normal measuring points can be registered.)	Virtual measuring point can not register to the arithmetic expression of virtual measuring point.
		Specific consumption points *3		Energy amount (measuring point or virtual calculation point) is divided by production amount (measuring point or virtual calculation point).	
		Equipment efficiency		Quality = Number of non-defective products / Number of processed products Performance = (Standard cycle time × Number of processed products) / (Loading time - Downtime) Availability = (Loading time - Downtime) / Loading time Overall equipment efficiency = Availability × Performance × Quality	
	Monthly *3	Virtual measuring point	Computed from the data collected at the logging time once every day	Same as daily	
		Specific consumption measuring point		Same as daily	
	Annual *3	Virtual measuring point	Computed from the data collected at the logging time once every month	Same as daily	
		Specific consumption measuring point		Same as daily	

*2 Contact output is possible up to 32 points by using internal output unit (up to 16 points) and CC-Link remote I/O.
In addition, contact output of the following is possible within 32 points.
(Error information, Upper/lower limit monitoring, Energy plan value monitoring, Specific consumption target value monitoring, Operating status monitoring, Demand alarm, and Demand control.)
Number of output points are up to 32 points even if contact output is CC-Link remote I/O only.

*3 Calculation accuracy of the virtual measuring point and the specific consumption measuring point, can be selected from [Integer], [1 digit], [2 digits], [3 digits], [4 digits], and [5 digits] (the number of digits after the decimal point).

Item		Specification	Remarks
Saving function	Zoom (1 minute)	Data for 62 days 1-hour data is saved in one file. (Data at 1-minute intervals from one hour (at 00 minutes) to the next hour (at 00 minutes))	Saved in the CompactFlash memory card.
	Zoom (5 minutes)	Data for 14 days 1-hour data is saved in one file. (Data at 5-minute intervals from one hour (at 00 minutes) to the next hour (at 00 minutes))	
	Daily	Data for 186 days 1-day data is saved in one file. (Data at 30-minute or 1-hour intervals from one day (at 00:00) to the next day (at 00:00))	
	Monthly	Data for 60 months 1-month data is saved in one file. (Data at 1-day intervals from the 1st day of one month to the 1st day of the next month)	
	Annual	Data for 5 years 1-year data is saved in one file. (Data at 1-month intervals from January of one year to January of the next year)	
	Virtual (daily)	Data for 186 days 1-day data is saved in one file. (Data at 30-minute or 1-hour intervals from one day (at 00:00) to the next day (at 00:00))	
	Virtual (Monthly)	Data for 60 months 1-month data is saved in one file. (Data at 1-day intervals from the 1st day of one month to the 1st day of the next month)	
	Virtual (Annual)	Data for 5 years 1-year data is saved in one file. (Data at 1-month intervals from January of one year to January of the next year)	
	Specific consumption (daily)	Data for 186 days 1-day data is saved in one file. (Data at 30-minute or 1-hour intervals from one day (at 00:00) to the next day (at 00:00))	
	Specific consumption (Monthly)	Data for 186 days 1-day data is saved in one file. (Data at 30-minute or 1-hour intervals from one day (at 00:00) to the next day (at 00:00))	
	Specific consumption (Annual)	Data for 5 years 1-year data is saved in one file. (Data at 1-month intervals from January of one year to January of the next year)	
	Equipment (daily)	Data for 186 days 1-day data is saved in one file. (Data at 30-minute or 1-hour intervals from one day (at 00:00) to the next day (at 00:00))	
	Operation history	Operation monitoring information is saved in operation history data files. (64 KB × 4 × Number of operation monitoring points)	
	System log	System error information is saved in system log files. (256 KB × 8)	
	Demand (daily)	Data for 186 days 1-day data is saved in one file. (Data at 15-minute, 30-minute or 1-hour intervals from one day (at 00:00) to the next day (at 00:00))	
	Demand (Monthly)	Data for 60 months 1-month data is saved in one file. (Data at 1-day intervals from the 1st day of one month to the 1st day of the next month)	
	Demand (Annual)	Data for 5 years 1-year data is saved in one file. (Data at 1-month intervals from January of one year to January of the next year)	
	Demand alarm and control history	Record the occurrence/restore of the alarm, ON/OFF of the alarm output, and ON/OFF of the control output to the demand alarm/control history data file. (128KB×62 files)	
Deleting function		Logging data files are deleted when their storage period expires.	

Item		Specification	Remarks
Transfer functions	Zoom (1 minute)	1-hour data is transferred once every hour.	Data is automatically transferred to a designated FTP server. *4
	Zoom (5 minutes)	1-hour data is transferred once every hour.	
	Daily	Data of the day is transferred once every hour.	
	Monthly	Data of the month is transferred at the specified time, once every day.	
	Annual	Data of the year is transferred at the specified time, once every month.	
	Virtual (daily)	Data of the day is transferred once every hour.	
	Virtual (Monthly)	Data of the month is transferred at the specified time, once every day.	
	Virtual (Annual)	Data of the year is transferred at the specified time, once every month.	
	Specific consumption (daily)	Data of the day is transferred once every hour.	
	Specific consumption (Monthly)	Data of the month is transferred at the specified time, once every day.	
	Specific consumption (Annual)	Data of the year is transferred at the specified time, once every month.	
	Equipment (daily)	Data of the day is transferred once every hour.	
	Operation history	Updated operation history files are transferred once every hour.	
	System log	The latest data is transferred once every hour.	
	Demand (daily)	Data of the day is transferred once every hour.	
	Demand (Monthly)	Data of the month is transferred at the specified time, once every day.	
	Demand (Annual)	Data of the year is transferred at the specified time, once every month.	
	Demand alarm and control history	The latest data is transferred once every hour.	
Server function	Web server	Communicates with up to 5 clients simultaneously. Web browsers are used to view data.	
	FTP server	Communicates with 2 clients. Transfers files via FTP in response to a command request from a client.	
Client function	FTP client *5	Communicates with one server. Automatically transfers data files to the FTP server. (A path can be specified for each type.)	
	SMTP client *5	Communicates with one SMTP server. Notifies upper and lower limit errors and operation monitoring information by email.	
	SNTP client *5	Communicates with one SNTP server. Acquires and configures the time information periodically.	
	HTTP client	Communication with the air-conditioner of up to 10 Carry out the notification of the emergency stop control and Energy saving level change.	

*4 Because logging data file of the today or the current month will be overwritten, file transfer is unable when the data file in the FTP server is being used in other application S/W. Also, when the data file is set overwrite protection in the FTP server, cannot transfer.

*5 When the FTP server is stopped or LAN communication is abnormal, can not be transferred and retransmission. Also, since any data in the FTP server is not deleted automatically, clean up the server by deleting the data at regular intervals.

Item			Specification	Remarks
Display function	Real-time Monitor	Demand value Monitor	Display the following information about the demand control <Demand trend (today)> Bar graph: Current demand, Predicted demand, Demand (today) <Demand load curves> Line graph: Current demand, Predicted demand, Target demand value, Fixed alarm value <Demand information> Value: Current demand, Predicted demand, Adjusted power, Permissible power, Limit alarm value, Target demand value, Fixed/Limit alarm value Alarm status: Level 1/Level 2/Limit(Fixed)/ Energy saving level Time information: Time, Remaining time, Time zone Daily pattern Control status: Control type, Priority, ON/OFF Display update interval (automatic update): 10 sec	
		Current value Monitor	・Select the display type from the [Any Point] or the [Group] ・Select the view type from the [Accumulated value], [Hourly diff.], [Daily diff.], [Monthly diff.] <Analog value> Display the current measuring data <Electric energy and pulses> Accumulated value: Present meter indicated value Hourly diff.: Accumulated value from the previous hour to the present hour Daily diff.: Accumulated logging time from the previous month to the present month Monthly diff.: Accumulated logging time from the previous year to the present year <Demand measuring point> Current demand(Whole day, Time zone 1 - 10) : Present measuring data Electric energy(Whole day, Time zone 1 - 10) Accumulated value: Current integrated value Hourly diff.: Accumulated value from the previous hour to the present hour Daily diff.: Accumulated logging time from the previous month to the present month Monthly diff.: Accumulated logging time from the previous year to the present year Displays up to 10 measuring points in one screen. Display update interval (automatic update): 10 sec	
		Contact output Monitor	Display the contact output status of internal output unit and CC-Link remote I/O, contact control is possible by password authentication. <Contact control> Alarm output: ON -> OFF only Control output: ON/OFF The number of display points: 32 Display update interval (automatic update): 10 sec	

Item			Specification		Remarks
Display function	Graph display	Demand trend Graph	Display the demand trend graph Display interval: Select from Daily/Monthly/Annual		
			Daily	Display the demand for each demand time in 1 day. Bar graph: Demand(for each time zone) Line graph: Target demand value, Fixed alarm value	
			Monthly (Max demand of day)	Display the max. demand value of a day for 1 month. Bar graph: Max demand of day(for each time zone)	
			Annual (Max demand of month)	Display the max. demand value of a month for 13 months. Bar graph: Max demand of month(for each time zone) Line graph: Max List: Demand time limit when max demand of month is occurred(for each time zone)	
		Measuring point comparison Graph	・Display the multiple measuring points data of the specified display intervals(Zoom/Daily/Monthly/Annual) and display date and time. ・Display the measuring point comparison graph of max 12 measuring points in 1 screen.(The number of graph up to 10) (Display the measuring point alongside in the same graph or vertical row) ・Display the graph of measuring point that was registered to the display list file.(Up to 32 files) Optionally, can be added(deleted) to(from) the display list.		
			The following measuring point can be selected ・Electric energy and pulses ・Analog value ・Analog value(power factor) ・Virtual measuring point ・Demand measuring point Electric energy (Whole day, Time zone 1 - 10) Demand (Whole day, Time zone 1 - 10)		
			Display update interval (automatic update): Zoom(1 min)/Zoom(5 min)/Daily … 1 min Monthly/Annual … 1 hour		
		Date comparison Graph	・Display the measuring point with the date comparison ・Display in the specified display intervals (Zoom/Daily/Monthly/Annual) ・Display the date comparison graph of max 10 measuring points in 1 screen.(The number of graph up to 10) ・Display the graph of measuring point that was registered to the display list file.(Up to 32 files) Optionally, can be added(deleted) to(from) the display list.		
			The following measuring point can be selected ・Electric energy and pulses ・Analog value ・Analog value(power factor) ・Virtual measuring point ・Demand measuring point Electric energy (Whole day, Time zone 1 - 10) Demand (Whole day, Time zone 1 - 10)		
			Display update interval (automatic update): Zoom(1 min)/Zoom(5 min)/Daily … 1 min Monthly/Annual … 1 hour		

Item			Specification		Remarks
Display functions	Graph display	Specific consumption Graph	Display the specific consumption graph Display interval: Select from Daily/Weekly/Monthly/Annual Display update cycle (Automatic graph update): Daily/Weekly … 1 minute Monthly/Annual … 1 hour		
			Daily	Bar graph: Production and energy amount on the hour or on the half-hour Line graph: Accumulated specific consumption and energy amount on the hour or on the half-hour	Displays 1-day data on the hour or on the half-hour. Displays 2 days of data simultaneously.
			Weekly	Bar graph: Production and energy amount on the hour or on the half-hour Line graph: Accumulated specific consumption and energy amount on the hour or on the half-hour	Displays 7-day data on the hour or on the half-hour. Displays 7 days of data starting from the specified date serially.
			Monthly	Bar graph: Production and energy amount on the 1-day intervals Line graph: Accumulated specific consumption and energy amount on the 1-day intervals	Displays 1-month data at 1-day intervals. Displays 2 months of data simultaneously.
			Annual	Bar graph: Production and energy amount on the 1-month intervals Line graph: Accumulated specific consumption and energy amount on the 1-month intervals	Displays 1-year data at 1-month intervals. Displays 2 years of data simultaneously.
		Equipment graph	Display the Equipment graph Display interval: daily (fixed)		
			<Equipment group graph> Bar graph: Daily accumulated number of defective products Line graph:Daily accumulated downtime		Displays data for the number of registered equipment groups simultaneously.
			<Equipment efficiency graph> Bar graph: Availability/Performance/Quality on the hour or on the half-hour Line graph: Overall equipment efficiency on the hour or on the half-hour		Displays 1-day data on the hour or on the half-hour.
			<Equipment detail graphs 1 to 10> Bar graph: Usage amount on the hour or on the half-hour Line graph: Accumulated usage amount		A detail equipment graph shows data for the number of points registered in the equipment item details.

Item			Specification	Remarks
Display functions	Data file	Demand data	Display the following file <Annual(Max demand of each month)> Contains 1-year data logged at 1-month intervals <Monthly(Max demand of day)> Contains 1-month data logged on the specified hour every day <Daily> Contains 1-day data logged on the hour or on the half-hour <Demand alarm and control log> Record the history of the occurrence/restore of Level 1, Level 2, Limit/Fixed Record the history of the demand control ON/OFF 128KB×62files	
		Measuring point data	Display the following file <Annual> Contains 1-year data logged at 1-month intervals <Monthly> Contains 1-month data logged on the specified hour every day <Daily> Contains 1-day data logged on the hour or on the half-hour <Zoom (5 minutes)> Contains 1-hour data logged at 5-minutes intervals <Zoom (1 minute)> Contains 1-hour data logged at 1-minute intervals	
		Virtual calc. point data	Display the following file <Annual> Contains 1-year data logged at 1-month intervals <Monthly> Contains 1-month data logged on the specified hour every day <Daily> Contains 1-day data logged on the hour or on the half-hour	
		Sp. Cons. data	Display the following file <Annual> Contains 1-year data logged at 1-month intervals <Monthly> Contains 1-month data logged on the specified hour every day <Daily> Contains 1-day data logged on the hour or on the half-hour	
		Equipment data	Contains 1-day data logged on the hour or on the half-hour	
		Operation history data	Contains a log of ON/OFF states of operation monitoring points 64 KB × 4 Saved in a separate file for each operation monitoring point	
		System log	Contains a log of occurrence and recovery of measurement errors, upper and lower limit errors, etc. 256 KB × 8	

Item			Specification		Remarks
Display functions	Setting of Measuring point list	Setting of Demand control	Demand setting	Display the following settings ・Demand basic setting ・Alarm setting ・Demand control setting	
			Time zone setting	Display the setting of Time zone name and Daily pattern	
			Calendar setting	Display the following settings ・Time zone setting ・Daily pattern setting ・Calendar setting	
			Energy saving level monito setting	Display the following settings ・Energy saving level monitor setting ・Energy saving level alarm setting ・Air-controller connection setting	
		Measuring point list	Electric energy and pulses	Displays the settings of measuring points (electric energy and pulses)	
			Analog value	Displays the settings of measuring points (analog values)	
			Virtual	Displays the settings of virtual calculation points	
			Specific consumption	Displays the settings of specific consumption points	
			Operation monitoring	Displays the settings of operation monitoring points	
			Equipment	Displays the settings of equipment	
			Group	Displays the details of groups registered	
			Equipment group	Displays the details of equipment groups registered	
		Setting of Planned value	Energy planned value (Jan. - Dec.)		
			Energy planned value (Apr. - Mar.)		
			Target value of specific consumption		
		Data output list	Data output group list	Displays the data output setting	
			Data output (Demand control)	Displays the data output setting (Demand control)	
		Contact output list	Displays the settings of contact output		
		Email notification list	Displays the settings of e-mail notification		
		File transfer	Displays the settings of file transfer		
		Time adjustment	Displays the settings of automatic time adjustment		
	Demand alarm occurrence display		Displays when the demand alarm occurs		

Item				Specifications	Remarks
Surveillance functions	System log			Contains a log of occurrence and recovery of measurement errors, upper and lower limit errors, etc. 256 KB × 8	
	Demand control			Level 1 alarm / Level 2 alarm / Limit alarm / Fixed alarm / demand control unit error of the alarm state is monitored at 10-second intervals	
	Email notification *6 *7	Boot notification		Energy Saving Data Collecting Server is booted up.	Sent to the designated address for each event (one address for each event).
		Error notification		Error occurs during reading/writing to CompactFlash memory card.	
				Measurement error occurs the specified number of times consecutively or normal measurement recovers. Monitored at 10-second intervals. Number of times that can be specified: 1 to 18 (depending on the settings)	
				File transfer error occurs. Monitored at 1-hour intervals.	
				Automatic time adjustment error occurs. Monitored at specified intervals (daily/weekly/monthly).	
				Data output error occurs the specified number of times consecutively or normal output recovers. Monitored at 1-minute intervals. Number of times that can be specified: 1 to 3 (depending on the settings)	
				Battery error occurs. Monitored at 1-minute intervals.	
		Upper and lower limit monitoring		Upper and lower limit error occurs on a measuring point. 32 points max. Monitored at 10-second intervals.	Sent to the designated address for each event (one address for each event).
		Operation monitoring notification		The status of an operation monitoring point changes. 32 points max. Monitored at 10-second intervals.	
		Energy planned value monitoring notification		Energy planned value (accumulated value per day) is exceeded. 255 points max. Monitored at the monthly logging time (at 1-day intervals).	
		Specific consumption planned value monitoring notification		Specific consumption planned value is exceeded. 64 points max. Monitored every hour on the hour or on the half-hour.	
		Regular report		Specified messages. Up to 128 characters in one message. Up to 8 messages.	Each message is sent to its designated address at its designated time (one sending time and receiving address for each message).
			Daily	On the specified hour, once every day	
			Weekly	On the specified hour of the specified day, once every week	
			Monthly	On the specified hour of the specified day, once every month	
		Demand notification		Demand control alarm occurred and restored (Level1alarm / Level 2 alarm / Limit, Fixed alarm / Battery error (demand control unit) / Outside synchronism error / Demand control error） Monitored at 10-second intervals.	Send to specified destination for each event (One destination for each event)

*6 Mail notification is only function of sending mail data (destination/message) to mail server (SMTP).
Mail server receives the data, and sends the message (e-mail) to each destination.

*7 Timing to actually receive will depend on the situation of the mail server processing and communication network.

Item		Specifications	Remarks
Control functions	Demand control	Control the circuit that was set the priority order, as the predicted demand does not exceed the target demand. (up to 12 circuits)	
		Demand control type: The following 6 patterns Cyclic - Reclosing Cyclic - Reclosing after Demand time limit Cyclic - Reclosing after Reclosing interval Priority order - Reclosing Priority order - Reclosing after Demand time limit Priority cyclic - Reclosing	
	Manual control	By the password authentication in real-time display screen of contact output monitor, manual control is possible (alarm OFF control, ON/OFF control of demand controlled circuit).	
Calendar setting management function		Demand management is possible by setting the time zone switching calendar (up to 24 months)	
		Time zone: up to 10, Daily pattern: up to 40	
Maintenance functions	Planned value/Target value setting	Specifies monthly planned values and specific consumption planned values for the year (fiscal year).	
	Time setting	Reads and sets the current date and time.	

Item				Specifications		Remarks
Demand setting functions	Normal	Circuit name		Input the circuit name to monitor		
		VCT ratio		1 - 100000	Default: 600	
		Pulse constant value		1 - 50000(pulse/kWh)	Default: 50000	
		Multiplying factor		Checked/Not checked	Default: Not checked	
			Number of digits	4 - 6	Default: 5	
			Multiplying factor	1 - 100000	Default: 1	
		Demand time limit adjustment type		Initial TS/ External pulse signal	Default:Initial TS	
		Demand time limit		15/30/60(minutes)	Default: 30	
	Alarm and Control	Alarm/Control mask time		0 - n(minutes) n=demand time limit	Default: 6	
		Alarm type		Limit alarm/Fixed alarm	Default: Limit alarm	
		Management based on calendar		Checked/Not checked	Default: Not checked	
		Settings for each Time zone		Set the following to the time zone 1 - 10 Target demand value, Base power, Fixed alarm value		
		Target demand value		0.0 - 999999.9(kW)	Default: 300.0	
		Base power		0.0 - 99999.9(kW)	Default: 0.0	
		Fixed alarm value		0.0 - 999999.9(kW)	Default: 240.0	
		Time zone name		8 characters	Default: Whole day	
		Demand control type		Selected from the following ・Cyclic - Reclosing ・Cyclic - Reclosing after Demand time limit ・Cyclic - Reclosing after Reclosing interval ・Priority order - Reclosing ・Priority order - Reclosing after Demand time limit ・Priority cyclic - Reclosing		
		Number of circuits		Up to 12 circuits		
		Priority order		Invalid, 1 - 12	Default: Invalid	
		Control capacity		0.0 - 99999.9(kW)	Default: 0.0	
		Reclosing interval		1 - n(minutes) n=demand time limit	Default: 5	
		Manual control		Up to 12 circuits		If manual control, requires a password input
	Calendar	Daily pattern setting		Set the time zone 1-10 to the daily pattern 1-40 with each demand time limit		
		Calendar setting		Set the daily pattern until December 31 of following year from the set year.		

Item		Specifications	Remarks
Data collecting settings functions	CC-Link terminal	Set the following contents Registration of terminal to be connected Carry out the normal setting and station No. registration for each terminal	Up to 42 units can be registered
	PLC/GOT	Set the following contents Register the PLC/GOT to be connected Communication method (Ethernet direct, Convert Ethernet / serial) IP address, Port No., and Station No. of the device to be connected	Up to 8 units can be registered
	Measuring point	Set the measuring element to collect If the PLC/GOT Specify the device for each registered equipment, and get the word data or bit data	Up to 255 points can be registered
	Virtual	Set the arithmetic expressions with parentheses	Up to 128 points can be registered
	Specific consumption	Register the specific consumption * Set the display of the specific consumption	Up to 64 points can be registered
	Equipment	Set the following contents Standard cycle time Operating time Quality rate	Required when calculating the equipment efficiency Up to 42 points can be registered
Project management functions	Save	Save the contents that have been registered by the setting software	
	Write	Write the project to the EcoWebServerIII	Login ID and password is required Default Login ID: ecoV Password: ecopass
	Read	Read the project of the EcoWebServerIII	
	Collate	Collate the project of EcoWebServerIII and setting software.	

Item			Specifications	Remarks
Setting functions	IP address setting		Set the following contents CH1 IP address Default: 192.168.10.1 Subnet mask Default: 255.255.255.0 Default gateway Default: None DNS setting Default: None CH2 IP address Default: 192.168.3.1 Subnet mask Default: 255.255.255.0 Default gateway Default: None	
	Time setting		Read and write clock of EcoWebServerIII	
	Auto time adjustment		Set the following contents IP address registration of SNTP server Time to carry out the auto time adjustment	
	Logging time setting		Set the following contents Daily log Default: half Monthly log Default: 0H Annual log Default: 1D 0H	
	Login ID Password	For maintenance	Setting the password	Default Password: ecopass
		For getting data	Setting the loggin ID and password	Default Loggin ID: guest Password: user
		For system management	Setting the loggin ID and password	Default Loggin ID: ecoV Password: ecopass
Output setting functions	Data output setting		Set the measuring data to be output to the PLC/GOT	
	Data output setting (demand control)		Set the demand control data to be output to the PLC/GOT	
	Contact output setting		Set the contact output destination of the alarm output and demand control	
	Mail notification setting		Set the mail notification destination	
	File transfer setting		Set the file transfer destination	
	Energy saving cooperation setting		Set the IP address of the air conditioning controller to be connected	
Test/adjustment function	Confirming the terminal connection		Confirm the connection status of the registered terminal	
	Confirming the contact output		Confirm the operation of contact output	
	Confirming mail send		Confirm the operation of mail send	
	Confirming file transfer		Confirm the operation of file transfer	
	Confirming air-conditioner connection		Confirm the operation of Energy saving level send	
	Integration value setting		Set the metric indication value to EcoWebServerIII	
	Collect data		Collect the csv file of EcoWebServerIII	
	Delete data		Delete the data in the EcoWebServerIII	
	Reset		Reset the EcoWebServerIII	

2. Before use

This chapter describes the part names and functions of EcoWebServerIII as well as the recommended system environment, the installation of the Setting software, the uninstallation of the Setting software, the upgrade of the Setting software, and the relevant settings of PCs, which are essential for using the Setting software.

2.1. Recommended system environment

The system environment requirements for this software to properly operate as follows:

Item	Description
System environment OS (basic software)	Microsoft® Windows XP Professional (32 bits) (English version) SP3 Microsoft® Windows Vista Business (32 bits) (English version) SP2 Microsoft® Windows 7 Professional (32 bits, 64bits) (English version) SP1 Microsoft® Windows 8.1 Pro (32bits, 64 bits) (English version)
CPU	Pentium® processor running at 1 GHz or higher, or compatible microprocessor (DOS/V compatible)
Memory*1	1GB or more
Hard disk*1	When the data collected by EcoWebServerIII save in the PC, requires its capacity.
CD drive	One or more drives (required in the software installation)
Display resolution*2	1280 x 1024 pixels or more
Display color*3	65536 colors or more
Input device	A mouse and a keyboard
English input system	The system included in OS (English version only)
External interface	A 10BASE-T/100BASE-TX or CompactFlash card reader (required when performing the write/read/check of projects via a drive)
Web browser*4	Internet Explorer® 7 (32 bits) or Internet Explorer® 8 (32 bits) or Internet Explorer® 9 (32 bits) or Internet Explorer® 10 (32 bits) or Internet Explorer® 11 (32 bits) or
Java plug-in	Oracle Java™ 7 JRE 7 (32-bit) Oracle Java™ 6 JRE 6 (32-bit)

*1 Note that the required memory and free space of hard disk are varied depending on the system environment.
*2 Use the default screen font size of "Small Fonts (standard). "If the font size is changed to "Large Fonts" or "Extra Large Fonts," the characters and images may not be displayed properly, and some portions of the window may be out of the screen.
*3 Although this software can be used in the 256-color mode, icons and other items cannot be displayed properly.
*4 In the environments where Internet Explorer® is not installed, the communication with EcoWebServerIII may not be performed.

2.2. Glossary

This following defines key terms used in this document.

Item	Description
Project	Refers to a set value that is used for the operation of EcoWebServerIII
Terminal	Refers to a CC-Link terminal or CC-Link master/local unit (local station). A maximum of 64 terminals can be registered.
PLC	Refers to PLC used by EcoWebServerIII to acquire the computer link communication data using Ethernet communication or an Ethernet/Serial adaptor cable. Up to 32 PLCs can be registered.
Measuring point	Refers to an item collected from a terminal. A maximum of 255 points can be registered.
Group	Refers to a group of measuring points. A maximum of 32 groups can be registered.
Operation monitoring measuring point	Refers to a measuring point for recording the operation status of equipment by monitoring digital input signals. Up to 32 of 255 measuring points can be registered.
Contact output	Refers to output when an event such as an error occurs in EcoWebServerIII. Up to 32 contact output points can be registered.
Virtual measuring point	Refers to a measuring point for which the computation result between measuring points is used as virtual measurement data. A maximum of 128 measuring points (excluding the 255 measuring points) can be registered.
Specific consumption measuring point	Refers to a measuring point for which the result of dividing energy amount by production amount is used as measurement data. A maximum of 64 measuring points (excluding the 255 measuring points) can be registered.
Equipment	Refers to a measuring point for recording an equipment status such as equipment efficiency. A maximum of 42 measuring points can be registered.
Equipment group	Refers to a group of equipment measuring points. A maximum of 42 groups can be registered.
Daily data	Refers to the data of a measuring point collected on the hour or on the half-hour for 1 day.
Weekly data	Refers to the data of a measuring point collected on the hour or on the half-hour for 7 days.
Monthly data	Refers to the data of a measuring point collected at 1-day intervals for 1 month.
Annual data	Refers to the data of a measuring point collected at 1-month intervals for 1 year.
Zoom data	Refers to the data of a measuring point collected at 1-minute or 5-minute intervals for 1 hour.
Virtual data (daily)	Refers to the data of a virtual measuring point collected on the hour or on the half-hour for 1 day.
Virtual data (monthly)	Refers to the data of a virtual measuring point collected at 1-day intervals for 1 month.
Virtual data (annual)	Refers to the data of a virtual measuring point collected at 1-month intervals for 1 year.
Specific consumption data (daily)	Refers to the data of a specific consumption measuring point collected on the hour or on the half-hour for 1 day.
Specific consumption data (monthly)	Refers to the data of a specific consumption measuring point collected at 1-day intervals for 1 month.
Specific consumption data (annual)	Refers to the data of a specific consumption measuring point collected at 1-month intervals for 1 year.
Operation history data	Refers to the data recorded when the status of an operation monitoring point is changed.
Demand data (daily)	Refers to demand data collected at the set demand timing for 1-day.
Demand data (monthly)	Refers to one month's worth of data recording the demand data collected daily at the designated time and the daily maximum demand.
Demand data (annual)	Refers to one year's worth of data recording the demand data collected monthly at the designated time and the monthly maximum demand.

Item	Description
Demand alarm and control history data	Refers to a record of the demand alarm occurrence/reset and demand control.
System log	Refers to the data of events such as errors that occur in EcoWebServerIII.
Maintenance password	Refers to a password required to reset EcoWebServerIII or to set dates and energy planned values/target Specific consumptions.
Data acquisition login ID and password	Refers to an account required to collect EcoWebServerIII data from FTP clients, and gives read-only permission.
System administration login ID and password	Refers to an account required for the system administration of EcoWebServerIII, and gives read and write permissions for all files.
FTP server	Refers to a server that provides files on the Internet (via LAN). FTP stands for File Transfer Protocol.
SMTP server	Refers to a mail server that performs the transmission process of email to distribute it to other mail servers on the Internet (via LAN). SMTP stands for Simple Mail Transfer Protocol.
SNTP server	Refers to a server that provides time information to clients on the network. SNTP stands for Simple Network Time Protocol.
Domain name	Refers to the identifier of a computer or computer group that is connected to the Internet (via LAN).
DNS server	Refers to a server that converts domain names into IP addresses on the Internet (via LAN). DNS stands for Domain Name System.

2.3. Installing the software

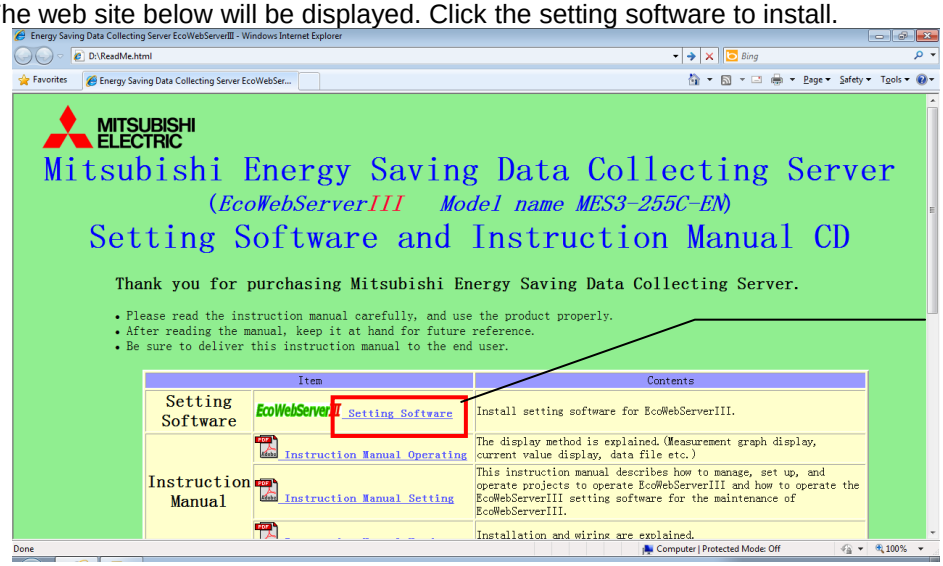
The setting software can be easily set up and launched by using the dedicated installer.
When setting up the EcoWebServerIII setting software for the first time, be sure to read this chapter before performing the set-up.
To perform the set-up, you must log in with the administrator privileges.

***1** The operations and dialog boxes may be varied depending on the type of OS on your PC or the operating environment.
MES3-255C-DM-EN is used in the following operations, but this also applies MES3-255C-EN.

*2 If an older version of the EcoWebServerIII setting software is already installed, see "2.5 Upgrading the software," and upgrade the setting software.

1 Inserting the CD and launching the installer

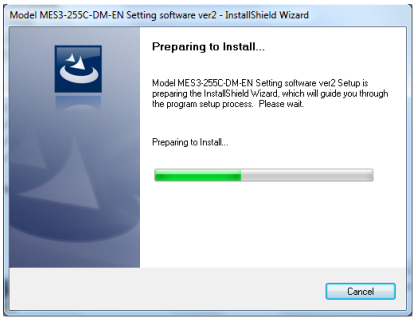
(1) Insert the EcoWebServerIII setting software set-up CD-ROM into the CD drive on your PC.
The web site below will be displayed. Click the setting software to install.


MITSUBISHI ELECTRIC
Mitsubishi Energy Saving Data Collecting Server
(EcoWebServerIII Model name MES3-255C-EN)
Setting Software and Instruction Manual CD
Thank you for purchasing Mitsubishi Energy Saving Data Collecting Server.
• Please read the instruction manual carefully, and use the product properly.
• After reading the manual, keep it at hand for future reference.
• Be sure to deliver this instruction manual to the end user.
Item
Contents
Setting Software
EcoWebServerIII Setting Software
Install setting software for EcoWebServerIII.
Instruction Manual
Instruction Manual Operating
The display method is explained. (Measurement graph display, current value display, data file etc.)
Instruction Manual Setting
This instruction manual describes how to manage, set up, and operate projects to operate EcoWebServerIII and how to operate the EcoWebServerIII setting software for the maintenance of EcoWebServerIII.
Installation and wiring are explained.

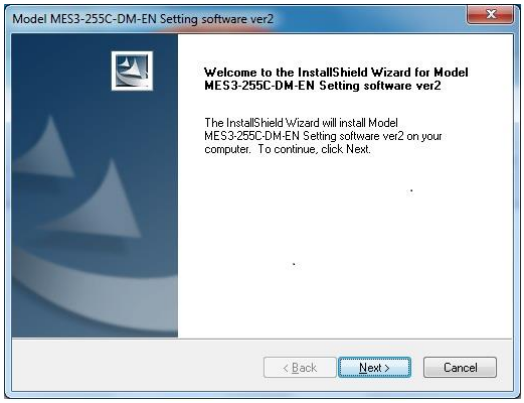
Click Setting Software.

* If the installer is not automatically launched, open the CD drive with Explorer, and double-click [ReadMe.html] in the root folder to run it.

(2) Security warning screen will appear so click [Execute]. The installation will start.
Click the [Cancel] button to cancel the installation.

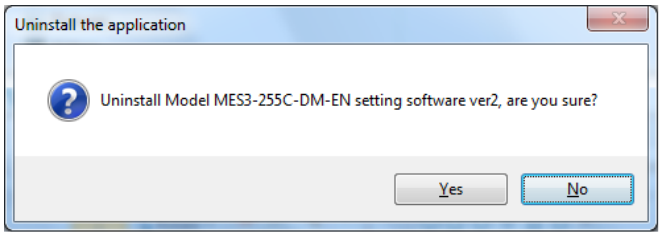

Model MES3-255C-DM-EN Setting software ver2 - InstallShield Wizard
Preparing to Install...
Model MES3-255C-DM-EN Setting software ver2 Setup is preparing the InstallShield Wizard, which will guide you through the program setup process. Please wait.
Preparing to Install...
Cancel

(3) The [Welcome to the InstallShield Wizard for Model MES3-255C-DM-EN Setting software ver2] dialog box is displayed.
Click the [Next] button. Click the [Cancel] button to cancel the installation.


Model MES3-255C-DM-EN Setting software ver2
Welcome to the InstallShield Wizard for Model MES3-255C-DM-EN Setting software ver2
The InstallShield Wizard will install Model MES3-255C-DM-EN Setting software ver2 on your computer. To continue, click Next.
< Back
Next >
Cancel

Remarks

If the installer is run when the EcoWebServerIII setting software Ver. 2 is already installed, the [Uninstall the application] confirmation is displayed.

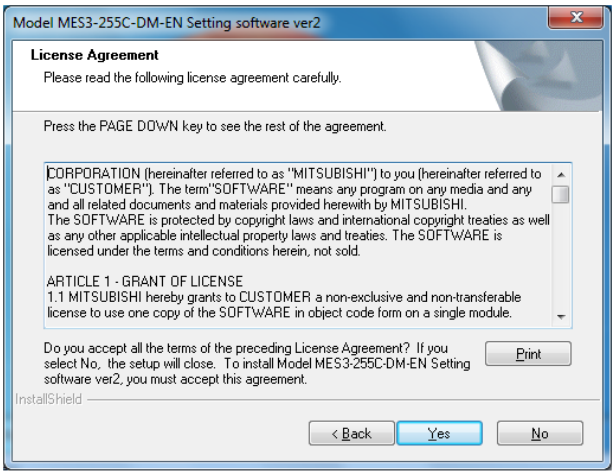


To reinstall, uninstall the software with the following procedure, and then install again.

- Click the [Yes] button to uninstall the EcoWebServerIII setting software Ver. 2. Click the [No] button to cancel the uninstallation.
- When uninstallation is completed, the [Uninstall complete] screen appears.

2 Checking the license agreement

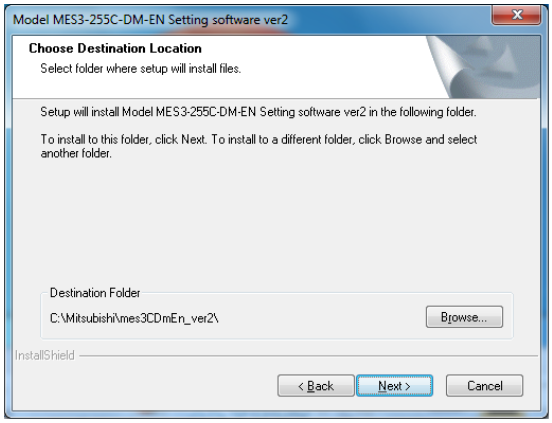
The [License Agreement] dialog box is displayed.


Model MES3-255C-DM-EN Setting software ver2
License Agreement
Please read the following license agreement carefully.
Press the PAGE DOWN key to see the rest of the agreement.
CORPORATION (hereinafter referred to as "MITSUBISHI") to you (hereinafter referred to as "CUSTOMER"). The term "SOFTWARE" means any program on any media and any and all related documents and materials provided herewith by MITSUBISHI.
The SOFTWARE is protected by copyright laws and international copyright treaties as well as any other applicable intellectual property laws and treaties. The SOFTWARE is licensed under the terms and conditions herein, not sold.
ARTICLE 1 - GRANT OF LICENSE
1.1 MITSUBISHI hereby grants to CUSTOMER a non-exclusive and non-transferable license to use one copy of the SOFTWARE in object code form on a single module.
Do you accept all the terms of the preceding License Agreement? If you select No, the setup will close. To install Model MES3-255C-DM-EN Setting software ver2, you must accept this agreement.
Print
InstallShield
< Back
Yes
No

When accepting the license agreement, click [Yes] button.
If you do not accept the license agreement, click the [No] button to cancel the installation.

3 Installing the software

(1) The [Choose Destination Location] dialog box is displayed.


Model MES3-255C-DM-EN Setting software ver2
Choose Destination Location
Select folder where setup will install files.
Setup will install Model MES3-255C-DM-EN Setting software ver2 in the following folder.
To install to this folder, click Next. To install to a different folder, click Browse and select another folder.
Destination Folder
C:\Mitsubishi\mes3CDmEn_ver2\
Browse...
InstallShield
< Back
Next >
Cancel

*1 The default installation locations of each product are listed below.

Product model	Installation location
MES3-255C-EN	C:\Mitsubishi\mes3CEn_ver2\
MES3-255C-DM-EN	C:\Mitsubishi\mes3CDmEn_ver2\

*2 The installation location can be changed by clicking the [Browse…] button to specify the desired folder. However, we recommend that you use the default installation location in normal conditions.

(2) Click the [Next] button to start the installation.
Click the [Cancel] button to cancel the installation.

(3) When the installation is completed, the [InstallShield Wizard Completed] dialog box is displayed. Click the [Finish] button.

* Depending on the operating environment, a message prompting you to restart the computer may be displayed after the installation is completed. In this case, follow the instruction in the displayed message to restart the computer.

(4) The installation is completed.
You can launch the setting software from the Windows [Start] menu or the icon on the desktop.

2.4. Uninstalling the software

If the setting software is no longer needed, you can easily remove the software from your PC by using the uninstallation function of [Programs and Features].
To perform the uninstallation, you must log in with the administrator privileges.

*1 **The operations and dialog boxes may be varied depending on the type of OS on your PC or the operating environment.**
MES3-255C-DM-EN is used in the following operations, but this also applies MES3-255C-EN.

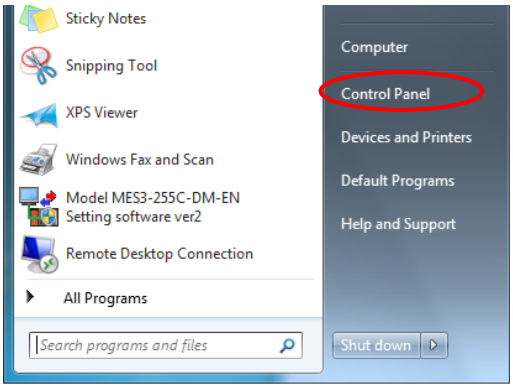
*2 **Even if the uninstallation is performed, the created projects are not deleted.**

***3 Uninstall after you have finished this software.**

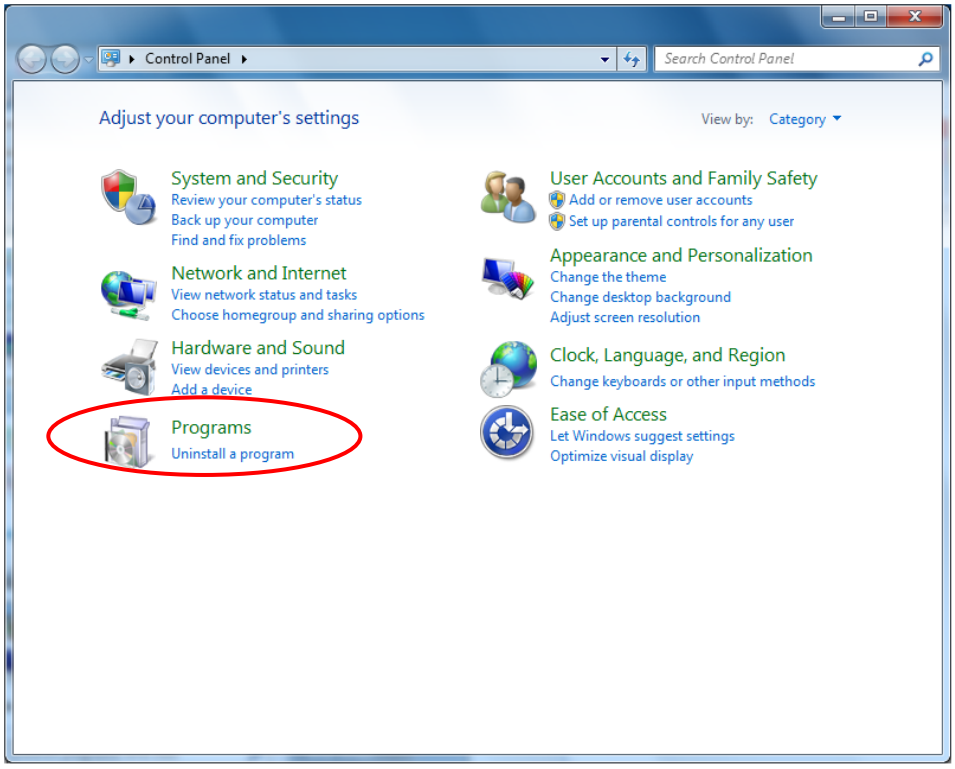
1 Uninstalling the software

<Procedures in Windows 7>

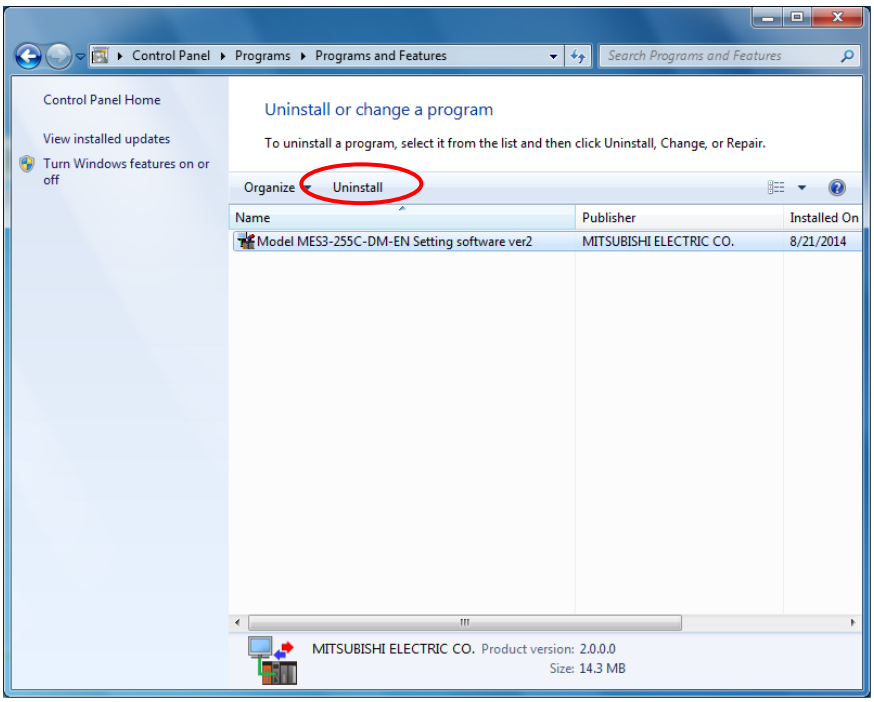
(1) Open [Control Panel] of Windows.



(2) Open [Programs] - [Uninstall a program].

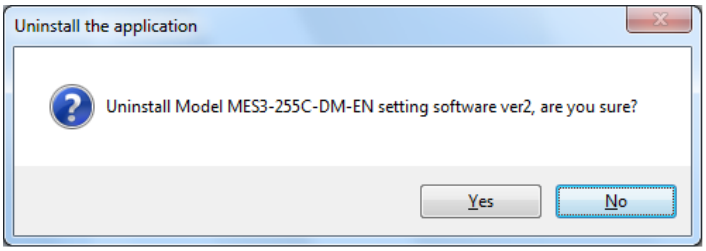


(3) Select the installed setting software, and click [Uninstall].


Control Panel ▸ Programs ▸ Programs and Features
Search Programs and Features
Control Panel Home
View installed updates
Turn Windows features on or off
Uninstall or change a program
To uninstall a program, select it from the list and then click Uninstall, Change, or Repair.
Organize
Uninstall
Name
Publisher
Installed On
Model MES3-255C-DM-EN Setting software ver2
MITSUBISHI ELECTRIC CO.
8/21/2014
MITSUBISHI ELECTRIC CO. Product version: 2.0.0.0
Size: 14.3 MB

∗ When the [User Account Control] dialog box is displayed, click [Continue].

(4) The [Uninstall the application] confirmation message is displayed.



Click the [Yes] button.
Click the [No] button to cancel the uninstallation.

(5) The uninstallation is performed.

When the uninstallation is completed, the [Uninstall Completed] dialog box is displayed.
Click the [Close] button.

2.5. Upgrading the software

This section describes the procedures when upgrading from an older version (EcoWebServerIII setting software Ver1) to Ver2.
* EcoWebServerIII setting software Ver1 and Ver2 can be installed on the same PC.
(How to check the version information? ☞ **Refer to "4.1 Operating Procedures: Starting/exiting the Setting software, Remarks."**)

1 Backing up the setting project of setting software(Ver1.2.1 or earlier)

Refer to "**4.2.6 Backing up projects**" and backup the setting project of older version (Ver1).
* In advance, reading from EcoWebServerIII Ver1 and to save, using the setting software Ver1.

2 Installing EcoWebServerIII setting software Ver2

Refer to "**2.3 Installing the software**" and install the EcoWebServerIII setting software Ver2.

3 Restoring an older setting project using EcoWebServerIII setting software Ver2.

Refer to "**4.2.7 Restoring projects** " and restore the setting project that backed up in step 1.
After the restore, please check the following.

1) **Confirm the body registration contents of mail notification setting**
2) **Confirm the measurement point registration contents of contact output**
   After the restore, checking the ID240 - 255 of a list of registered measuring points before saving project.
   When exists the terminal name of measuring point is"Internal Output Unit" in the ID240 - 255, save the project after deleting the measuring point (In Ver2, contact output is not included in the measuring point).

4 Writing the project to EcoWebServerIII Ver2.

Refer to "**4.6.2 Project writing**" and write the project to EcoWebServerIII Ver2.

Remarks

- Do not read project from EcoWebServerIII Ver1 using the setting software Ver2.
  Perform the above steps surely.

3. Flow of settings

This chapter describes the flow of setting before operating EcoWebServerIII.

3.1. Procedures for initial settings (Common)

Initial settings for EcoWebServerIII are as following.

1 Performing the installation and wiring of the unit

Please wire the measurement to EcoWebServerIII, see details in manual – Hardware. Connect the measuring equipment and EcoWebServerIII.

When using the EcoWebServerIII with demand control function, connect the electric energy pulse signal from the dedicated CT for pulse detection, pulse detector (pulse converter), or electronic electricity meter.

2 Installation of the EcoWebServerIII setting software

Install the EcoWebServerIII configuration software to set the EcoWebServerIII IP address and time. Refer to section 2.3 Installing the software" for details on installation.

3 Connecting the personal computer and EcoWebServerIII

(1) Connect the personal computer and EcoWebServerIII
Connect the personal computer equipped with the setting server and the EcoWebServerIII with a LAN cable. Connect directly with a LAN straight cable or cross cable.

(2) Change the personal computer's IP address
Change the personal computer's IP address to connect with EcoWebServerIII. The EcoWebServerIII IP address is set to 192.168.10.1 as the default. Set the personal computer's IP address so this IP address can be accessed.

1. Take a note of the IP address set in the PC.

IP Address:	. . .
Subnet mask:	. . .
Default gateway:	. . .

2. Change IP address set in the PC according to the IP address (factory setting: 192.168.10.1) set in the product.

IP address for the product	IP address for the PC
192.168.10.1	IP address: **192.168.10.xx** (xx is a value from 2 to 255.) (For example, change to 192.168.10.10, etc.) Subnet address: **255.255.255.0** Default gateway: Blank

4 Setting the EcoWebServerIII IP address

Set the IP address for the EcoWebServerIII with the setting software.

(1) Start the EcoWebServerIII configuration software

■ For CC-Link communication product with demand control function

Open [Start] menu ⇒ [All programs] - [Mitsubishi Energy Management] - [EcoWebServerIII(MES3-255C-DM-EN)ver2] - [Model: MES3-255C-DM-EN Setting software]

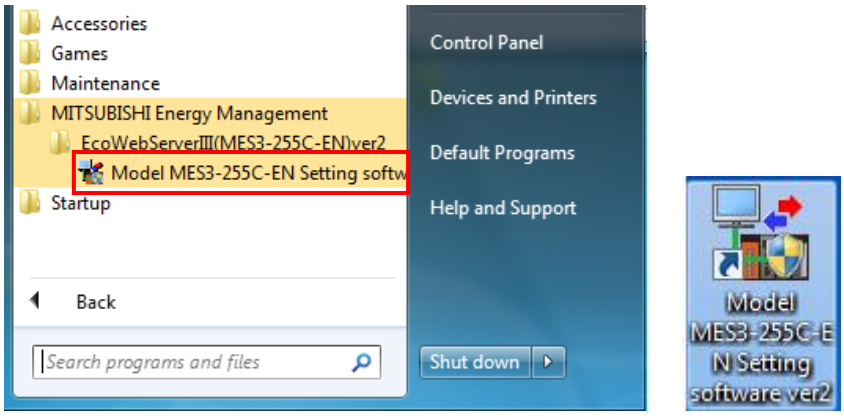
Or, double-click the [Model MES3-255C-DM-EN Setting software ver2] icon on the desktop.

■ For CC-Link communication product

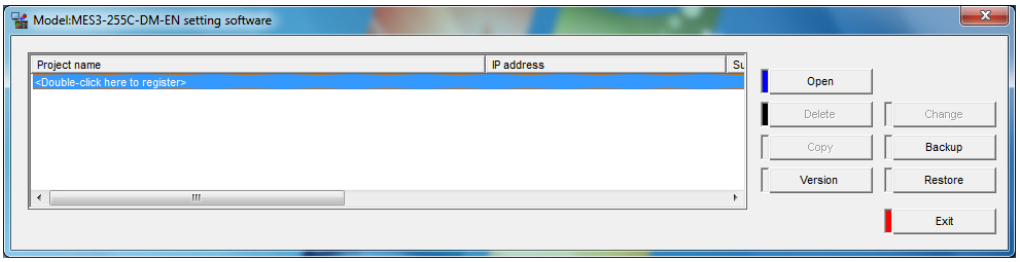
Open [Start] menu ⇒ [All programs] - [Mitsubishi Energy Management] - [EcoWebServerIII(MES3-255C-EN)ver2] - [Model: MES3-255C-EN Setting software]

Or, double-click the [Model MES3-255C-EN Setting software ver2] icon on the desktop.

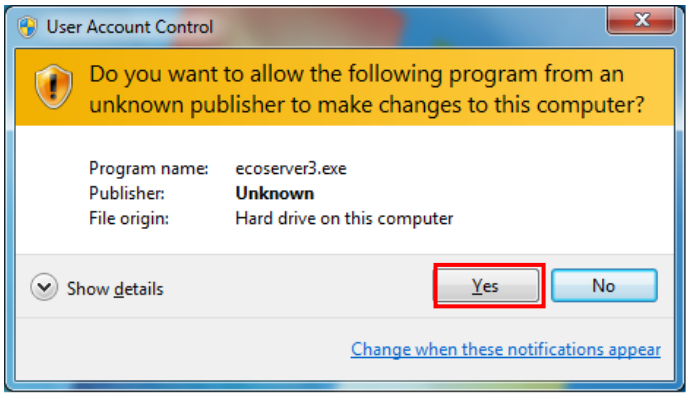
<Example>



The Project management dialog box is displayed shortly. When the following dialog box is displayed, the launch is completed.

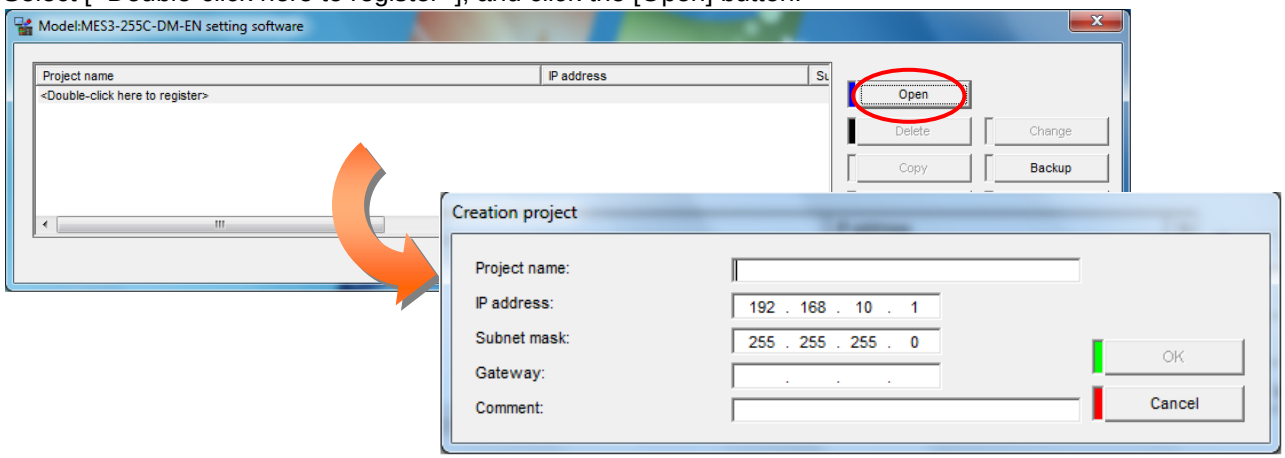


* When the [User Account Control] dialog box is displayed in Windows7, click [Yes] to launch the software.


User Account Control
Do you want to allow the following program from an unknown publisher to make changes to this computer?
Program name: ecoserver3.exe
Publisher: Unknown
File origin: Hard drive on this computer
Show details
Yes
No
Change when these notifications appear

(2) Creating a new project

On the Project Management dialog box:
Double-click [<Double-click here to register>]
Or,
Select [<Double-click here to register>], and click the [Open] button.

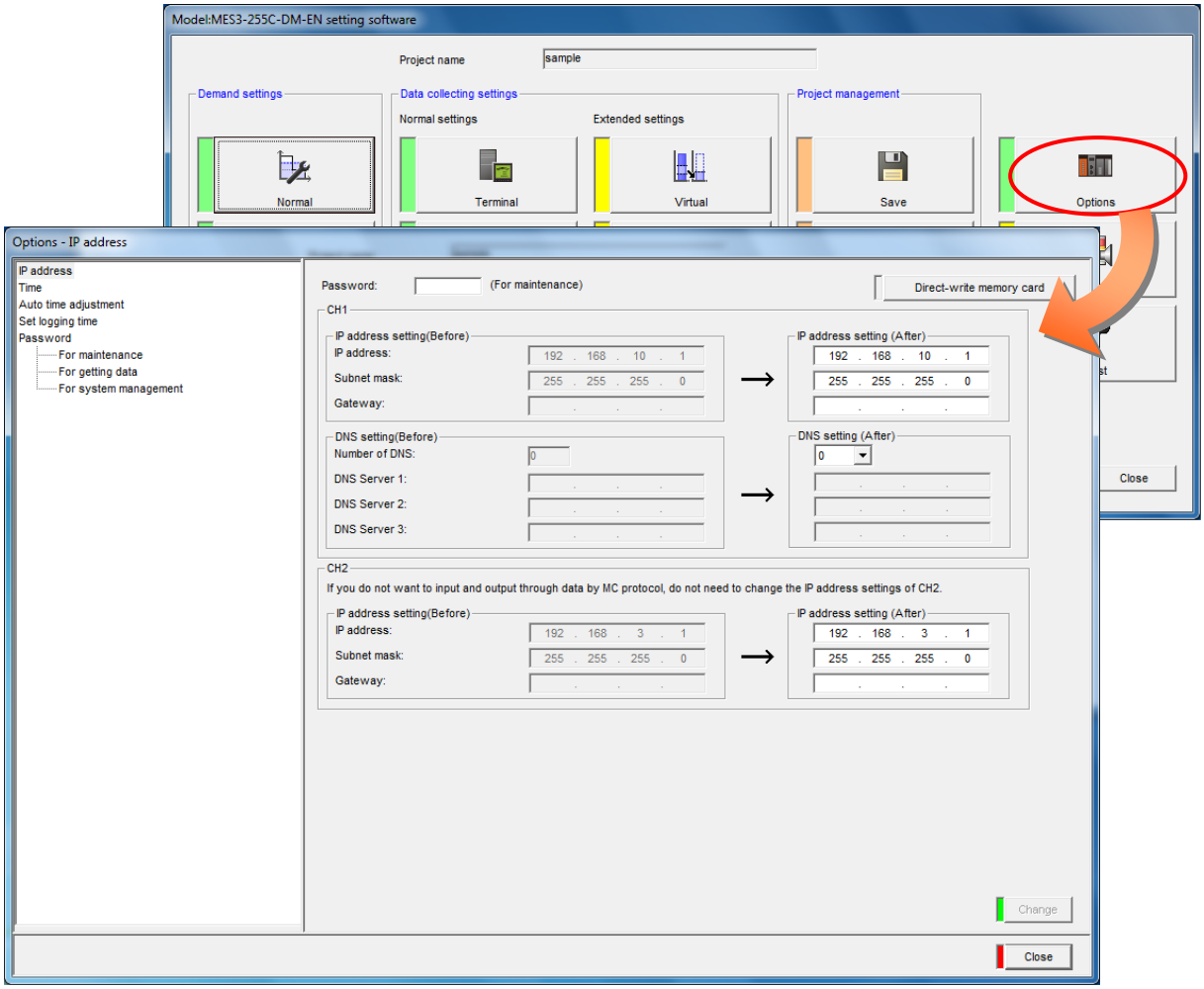


Set the following information on the Creation project dialog box, and click the [OK] button.

Project name	Any (Set a name for identifying the EcoWebServerIII such as "Factory A" or "Floor B".)
IP address	192.168.10.1 (Set the default IP address.)
Subnet mask	255.255.255.0
Default gateway	Blank
Comment	Any

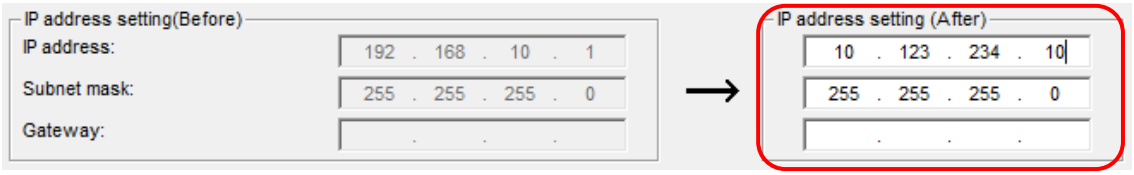
(3) Changing the EcoWebServerIII IP address

1. Click [Options] on the Project Setting dialog box.



2. Change the IP address at IP Address Settings (New)

   (An example to change the IP address to 10.123.234.10 is shown below. Enter the IP address, subnet mask and default gateway for operations.)

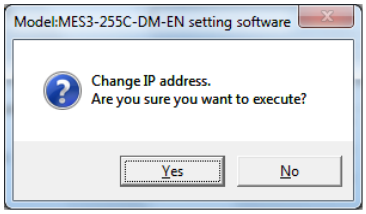

IP address setting(Before)
IP address:
192 . 168 . 10 . 1
Subnet mask:
255 . 255 . 255 . 0
Gateway:
IP address setting (After)
10 . 123 . 234 . 10
255 . 255 . 255 . 0

3. Inputting the maintenance password (The default maintenance password is **"ecopass"**.), and click the [Change] button.

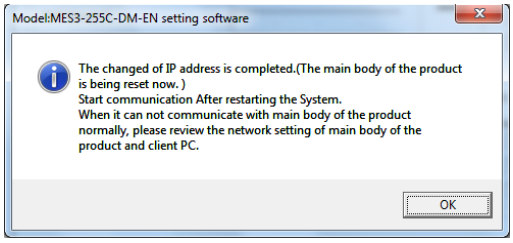
   * The default maintenance password is “ecopass”.

Enter the password after change if it was changed.

4. A message to confirm the changes appears when the [Change] button is clicked.
   Click the [Yes] button.



The following message appears when the changes are complete. Click the [OK] button.


Model:MES3-255C-DM-EN setting software
The changed of IP address is completed.(The main body of the product is being reset now.)
Start communication After restarting the System.
When it can not communicate with main body of the product normally, please review the network setting of main body of the product and client PC.
OK

*1 EcoWebServerIII is automatically reset after the IP address setting is changed. (The changed IP address is validated after resetting is complete.)

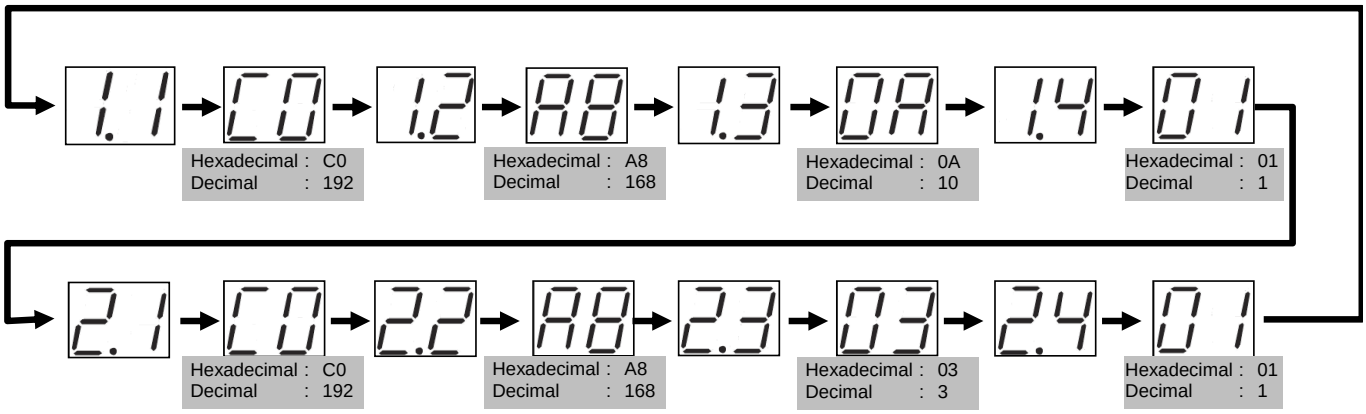
*2 It may take 1 to 8 minutes for the reset to finish. Wait for the [STA.] LED on the EcoWebServerIII unit to change to a steady light before starting communication.

*3 The [IP address], [Subnet mask] and [Default gateway] in the project information are also automatically updated to the new values.

(4) Checking the IP address set in EcoWebServerIII

1. Open the front cover on the server section, and set the MODE switch to the “STOP” position.
2. Hold the RESET switch to the “SEL.” position.
3. After the “CF CARD” LED turns off, turn the RESET switch to the “RES.” position.
4. After all the LEDs except the “POWER” LED on the power supply section turn off, return the RESET/SELECT switch to the central position.
5. Wait until the product starts up and the IP address is displayed on the 7-segment LED at the front.

   IP address display (Example of display when CH1 is set to 192.168.10.1 and CH2 is set to 192.168.3.1)



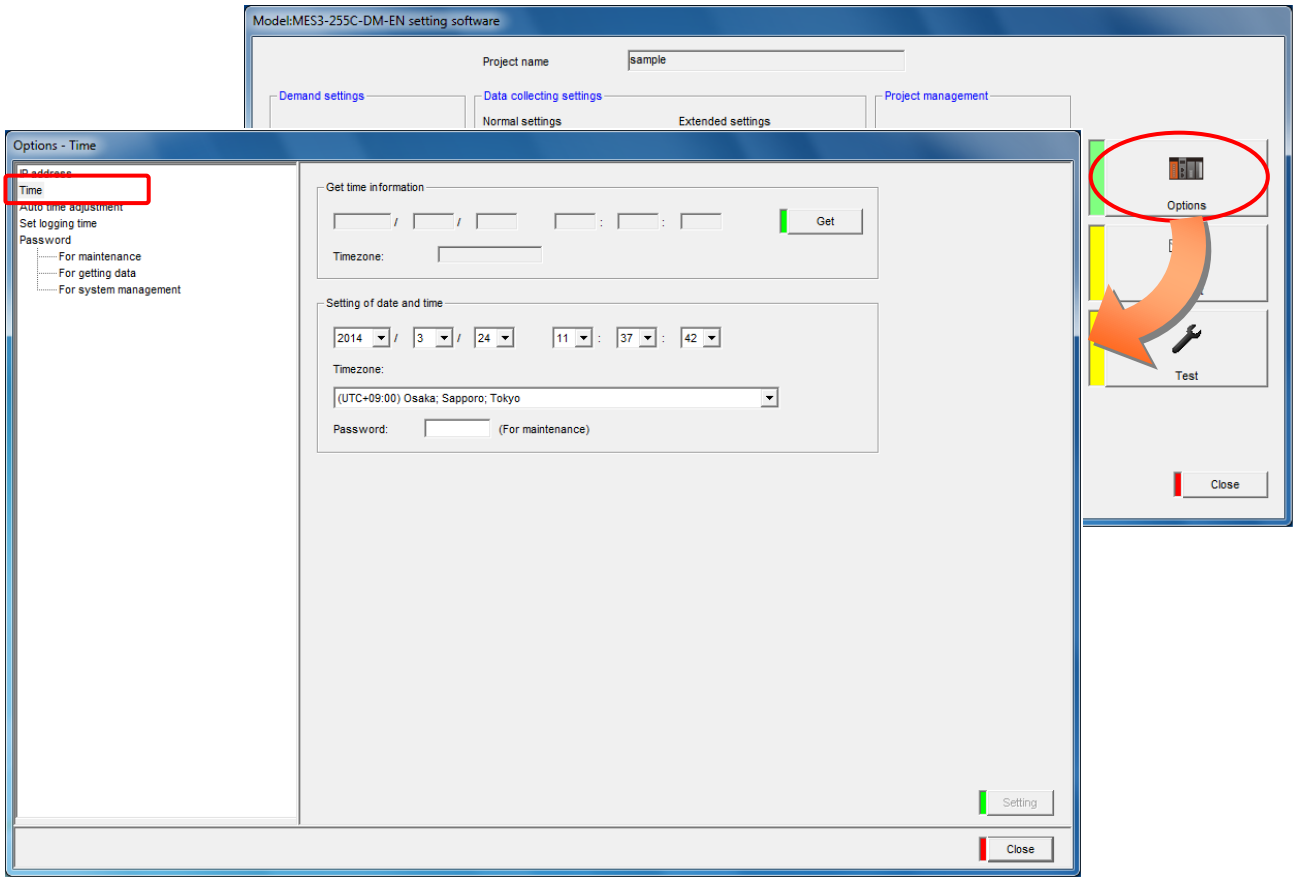
6. After you finish checking the IP address, turn the MODE/STOP/RUN switch to the “RUN” position.

5 Setting the EcoWebServerIII time

The EcoWebServerIII time is set to the default state before shipping. Change the time with the following procedure.

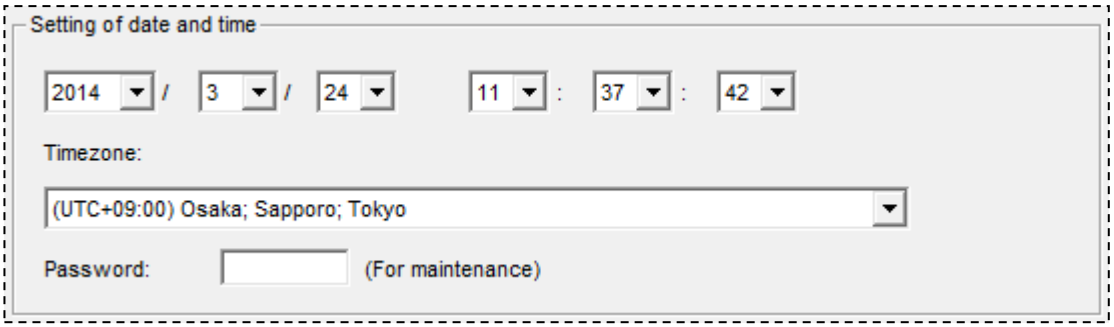
(1) Displaying the [Time] screen

1. Select [Time] in the tree menu on the EcoWebServerIII [Options] screen.



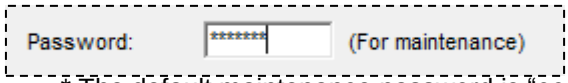
(2) Selecting and inputting [Setting of date and time]

Set the following items.



(3) Inputting the maintenance password

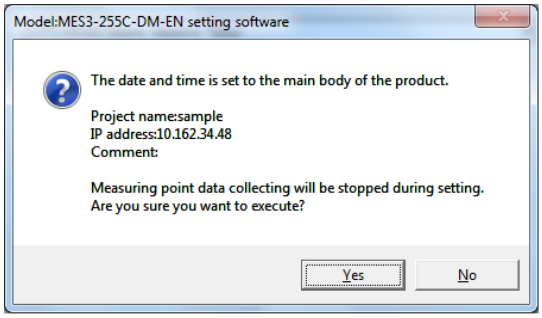
Type in the maintenance password (ecopass).



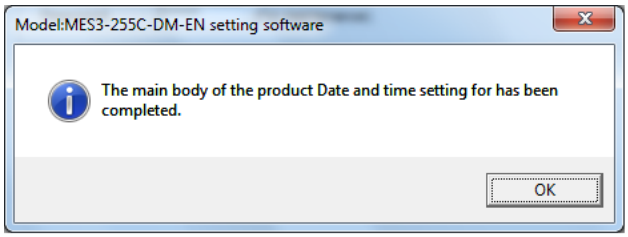
* The default maintenance password is “ecopass”.
Enter the password after change if it was changed.

(4) Changing

1. A confirmation message appears when the [Setting] button is clicked. Click the [Yes] button.


Model:MES3-255C-DM-EN setting software
The date and time is set to the main body of the product.
Project name:sample
IP address:10.162.34.48
Comment:
Measuring point data collecting will be stopped during setting.
Are you sure you want to execute?
Yes
No

2. When the setting of the date and time are completed, the following message will be displayed.



*EcoWebServerIII with demand monitor function

EcoWebServerIII with demand control function is shipped at the state of the battery OFF of the demand control unit, the state of clock of the demand control unit is reset, and error occurs.
Therefore, you need to reset the power of the EcoWebServerIII (4.9.11 EcoWebServerIII reset) after time setting.
Then be timed adjustment (by the TS switch).

3.2. Setting procedures for starting operation (without demand control function)

This section describes flow of settings from starting the EcoWebServerIII unit to starting data collection.

1 Data collecting settings step

(1) Measuring data collection settings [Basic settings]	Register the I/O terminal or PLC connected to the unit, register the measuring elements collected from the terminal as the measuring points, and sort into groups. (a) Register the terminal (b) Register the PLC/GOT (c) Register the measuring points	☛ **Refer to:** **"4.4.1 CC-Link terminal registration"** **"4.4.2 PLC/GOT registration"** **"4.4.3 Measuring point registration"**
(2) Measuring data collection settings [Advanced settings]	Set the options for expanding the scope of display and analysis. (This can be skipped when not using the following functions.) (a) Register the virtual measuring points (b) Register the specific consumption measuring points (c) Register the equipment	☛ **Refer to:** **"4.5.1 Virtual measuring point registration"** **"4.5.2 Specific consumption measuring point registration"** **"4.5.3 Equipment registration"** **"4.5.4 Equipment group registration"**
(3) EcoWebServerIII configurations	Set when using the automatic time setting function, or set the logging date and time. (a) Configure the automatic time settings (b) Configure the logging date and time	☛ **Refer to:** **"4.7.3 Auto time settings"** **"4.7.4 Logging date/time settings"**
(4) External device collaboration settings	Set this when using mail notification or file transfer. (This can be skipped when not using the following functions.) (a) Set the mail notification (b) Set file transfer (c) Set contact output	☛ **Refer to:** **"4.8.4 SMTP server settings"** **"4.8.6 EcoWebServerIII error settings"** **"4.8.7 Regular report registration"** **"4.8.8 Upper/lower limit notification registration"** **"4.8.9 Operating status notification registration"** **"4.8.10 Specific consumption target value notification registration"** **"4.8.11 Energy plan value notification registration"** **"4.8.12 FTP server setting"** **"4.8.13 Transfer enable/disable, transfer destination folder setting"** **"4.8.3 Contact output settings"**
(5) Saving and writing a project	Save the set project and write it to the main unit.	☛ **Refer to:** **"4.6.1 Project saving"** **"4.6.2 Project writing"**
(6) Starting data collection	Start collection of data from each terminal.	

3.3. Setting procedures for starting operation (with demand control function)

This section describes flow of settings from starting the EcoWebServerIII unit with demand control function to starting data collection.

1 Configuring demand control settings and data collection

(1) Demand control settings	Configure the settings related to demand control and control (a) Configure the demand basic settings (b) Configure the demand alarm and control settings	☛ **Refer to:** **"4.3.2 Demand basic settings"** **"4.3.3 Demand alarm and control settings"**
(2) Time zone and calendar settings	Set the time zone name, day pattern and calendar. (a) Configure the demand alarm and control settings (b) Configure the demand calendar settings	☛ **Refer to:** **"4.3.3 Demand alarm and control settings"** **"4.3.4 Demand calendar settings"** * Refer to the following section for details. **"2 Time zone calendar settings"**
(3) Measuring data collection settings [Basic settings]	Register the I/O terminal or PLC connected to the unit, register the measuring elements collected from the terminal as the measuring points, and sort into groups. (a) Register the terminal (b) Register the PLC/GOT (c) Register the measuring points	☛ **Refer to:** **"4.4.1 CC-Link terminal registration"** **"4.4.2 PLC/GOT registration"** **"4.4.3 Measuring point group registration"**
(4) Measuring data collection settings [Advanced settings]	Set the options for expanding the scope of display and analysis. (This can be skipped when not using the following functions.) (a) Register the virtual measuring points (b) Register the specific consumption measuring points (c) Register the equipment	☛ **Refer to:** **"4.5.1 Virtual measuring point registration "** **"4.5.2 Specific consumption measuring point registration "** **"4.5.3 Equipment registration "** **"4.5.4 Equipment group registration "**
(5) EcoWebServerIII configurations	Set when using the automatic time setting function, or set the logging date and time. (a) Configure the automatic time settings (b) Configure the logging date and time * When setting the time to the business meter, do not set the automatic time setting function.	☛ **Refer to:** **"4.7.3 Auto time settings"** **"4.7.4 Logging date/time settings"**

(6) External device collaboration settings	Set this when using mail notification, file transfer, or demand control. (This can be skipped when not using the following functions.) (a) Set the mail notification (b) Set file transfer (c) Set contact output (Set the contact output for control circuits 1 to 12)	☞ **Refer to:** **"4.8.4 SMTP server settings"** **"4.8.5 Demand notification"** **"4.8.6 EcoWebServerIII error notification settings"** **"4.8.7 Regular report registration"** **"4.8.8 Upper/lower limit notification registration"** **"4.8.9 Operating status notification registration"** **"4.8.10 Specific consumption target value notification registration"** **"4.8.11 Energy planning value notification registration"** **"4.8.12 FTP server setting"** **"4.8.13 Transfer enable/disable, transfer destination folder setting"** **"4.8.3 Contact output settings"**
↓		
(7) Energy saving collaboration settings	Set this when connecting to air-conditioner. (a) Set the Web-compatible controller address (b) Set the monitoring enable/disable, monitoring type, and alarm value 1 to 4	☞ **Refer to:** **"4.8.14 Energy saving level monitor setting"** **"4.8.15 Air-controller connection settings"**
↓		
(8) Saving and writing a project	Save the set project and write it to the main unit.	☞ **Refer to:** **"4.6.1 Project saving"** **"4.6.2 Project writing"**
↓		
(9) Test and adjustment	Confirm the operation before starting actual operation.	* Refer to the following section **"3. Test and Adjustment"** for details.
↓		
(10) Time lag adjustment	Set to the business meter's time lag, and press the time lag adjustment (TS) switch.※1	
↓		
(11) Start operation	Start demand control control and collection of data from each terminal.	

*1 **The LAN communication will cause a time lag in the time set with the main units setting and setting the time screen.**
After setting the clock, set the time to the time lag display on the business meter, etc., and press the time lag adjustment (TS) switch.

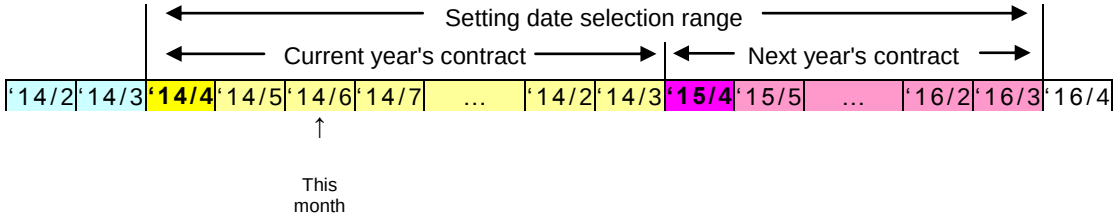
2 Setting the time zone and calendar

This section describes the procedures for setting the time zone calendar.

(1) Time zone name setting	Set (change) the time zone name as needed.	☞ **Refer to: "4.3.3 Demand alarm and control settings"**
↓		
(2) Day pattern setting	Set the pattern of one day's time zone.	☞ **Refer to: "4.3.4 Demand calendar settings"**
↓		
(3) Calendar setting	Set the policy changeover month, and each month's daily pattern calendar.	☞ **Refer to: "4.3.4 Demand calendar settings"**

∗ **The calendar can be set backward from the current date and time to the previous policy changeover month. Up to 24 months can be set. Set the calendar each time the time zone calendar is updated for a contract renewal.**

- **Policy changeover month: April**
- **Example when current date is June 2014**



Policy changeover month and calendar setting range

3 Test and adjustment

This section describes the procedures for confirming the operation before starting actual operation, and the procedure for adjusting to the business meter indicator value.

(1) Confirming the contact output	Turn the contacts for the set contact output No. 1 to 32 ON (close) or OFF (open).	☞ **Refer to:** **"4.9.2 Contact output operation check"**
↓		
(2) Confirming mail send	Send a test mail if necessary.	☞ **Refer to:** **"4.9.3 Demand control notification check"** **"4.9.4 Errors and regular notification check"** **"4.9.5 Measuring point data monitoring and notification check"**
↓		
(3) Confirming file transfer	Send a test file if necessary.	☞ **Refer to:** **"4.9.6 File automatic transfer check"**
↓		
(4) Confirming energy saving collaboration	Check the connection with air-conditioner if necessary.	☞ **Refer to:** **"4.9.7 Air-conditioning controller connection check"**
↓		
(5) Setting the count value	Adjust to the business meter indicator value. Enter the meter indicator value for each time zone.	☞ **Refer to:** **"4.9.8 Integrated count value settings"**
↓		
(6) Clearing the log	Delete the log data (logging data, alarm and control history data) and the system log.	☞ **Refer to:** **"4.9.10 Delete data"**

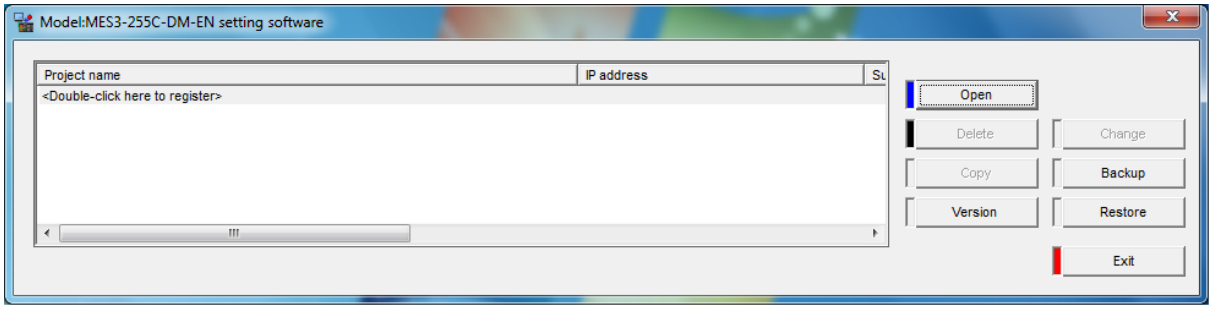
4. Operating procedures

This chapter describes the operating procedures for [Project management dialog box] and [Project settings dialog box].

* The operations and screens may differ according to the user's personal computer OS and working environment.

[Project management dialog box]:

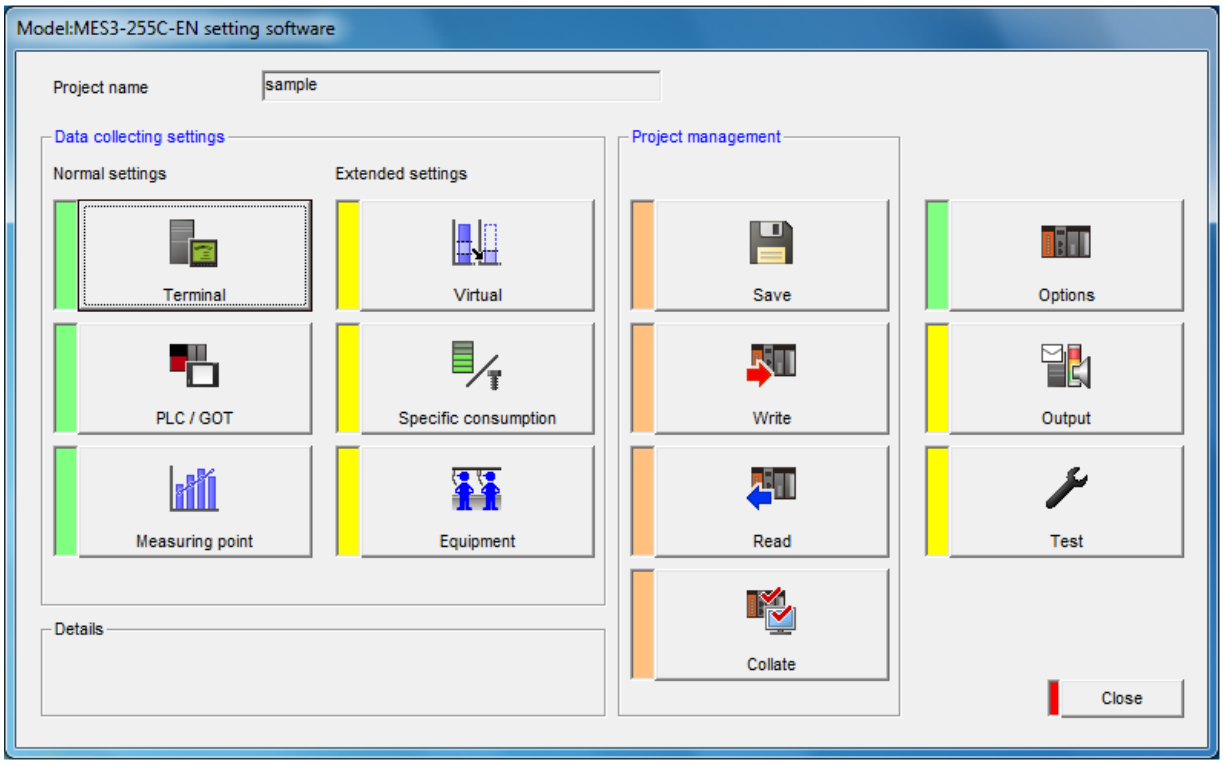
Manages the setting data of multiple units of EcoWebServerIII through the project management.



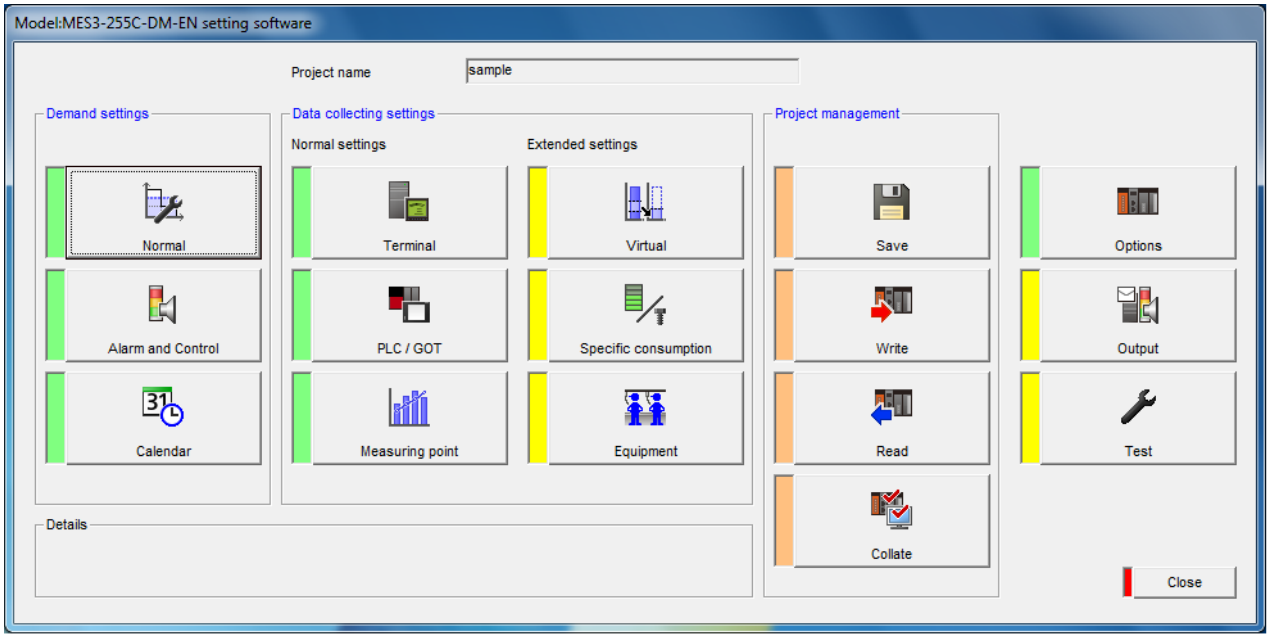
[Project settings dialog box]:

Performs settings and operations of "Demand settings", "Data collecting settings", "Project management", "Options", "Output", and "Test" for the projects that are managed through the project management.

<For CC-Link communication product>



<For CC-Link communication product with demand control function>



* The demand settings is supported only with EcoWebServerIII with demand control function.

A project refers to the setting data required for operating EcoWebServerIII. A maximum of 50 programs can be registered and managed with this setting software.

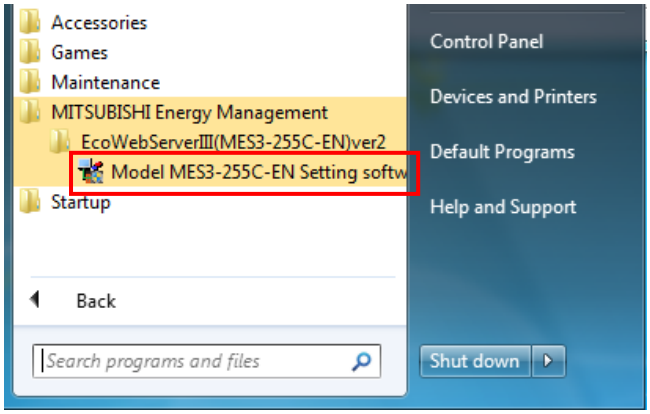
4.1. Starting/exiting the setting software

1 Starting the setting software

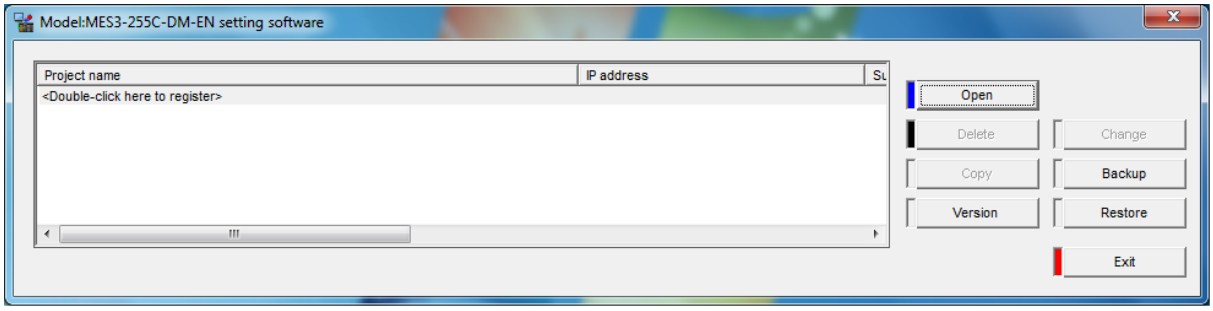
■ For CC-Link communication product
Open [Start] menu ⇒ [All programs] - [Mitsubishi Energy Management] - [EcoWebServerIII(MES3-255C-EN) ver2] ⇒Click [Model MES3-255C-EN Setting software ver2]
Or, double-click the [Model MES3-255C-EN Setting software ver2] icon on the desktop.

■ For CC-Link communication product with demand control function
Open [Start] menu ⇒ [All programs] - [Mitsubishi Energy Management] - [EcoWebServerIII(MES3-255C-DM-EN) ver2] ⇒Click [Model MES3-255C-DM-EN Setting software ver2]
Or, double-click the [Model MES3-255C-DM-EN Setting software ver2] icon on the desktop.

<Example>

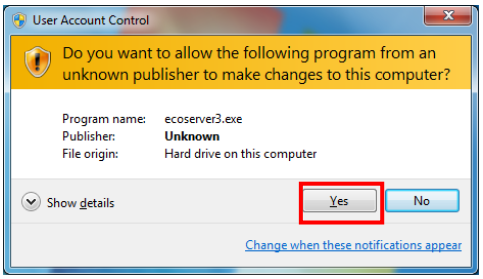


After a short time, the project management dialog box is displayed.



When the above dialog box is displayed, the launch is completed.

* When the [User Account Control] dialog box is displayed in Windows 7, click [Yes] to launch the software.


User Account Control
Do you want to allow the following program from an unknown publisher to make changes to this computer?
Program name: ecoserver3.exe
Publisher: Unknown
File origin: Hard drive on this computer
Show details
Yes
No
Change when these notifications appear

2 Exiting the setting software

Click the [Exit] button or the [×] button on the project management dialog box to exit the setting software.

Remarks

- When clicking the [Version] button, you can confirm the version of the setting software.

4.2. Project management

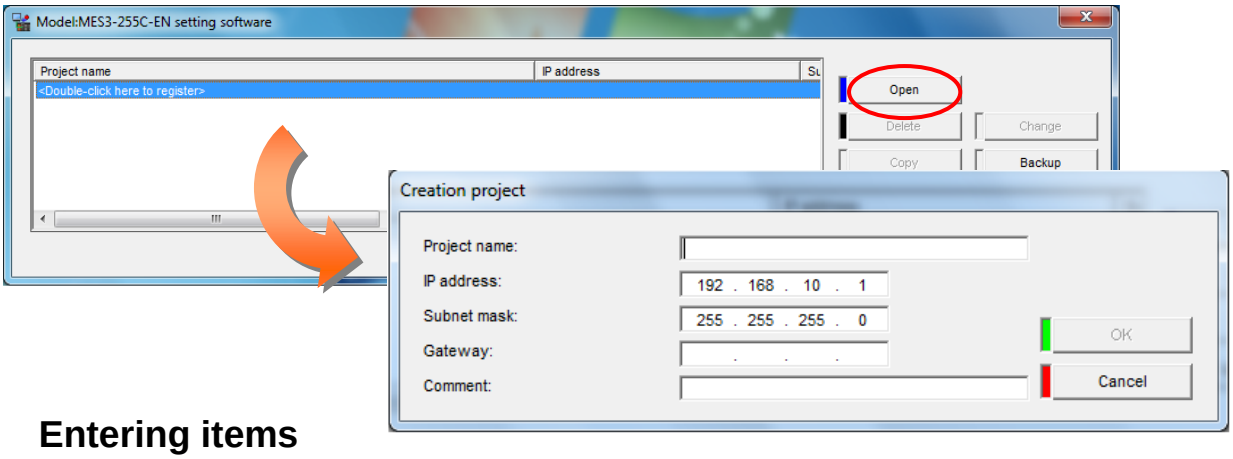
This section describes the procedures for operating the project management.
In the project management dialog box, you can register a new project as well as modify, delete, copy, back up, and restore a project.

4.2.1. Registering a new project

The procedures for registering a new project are as follows:

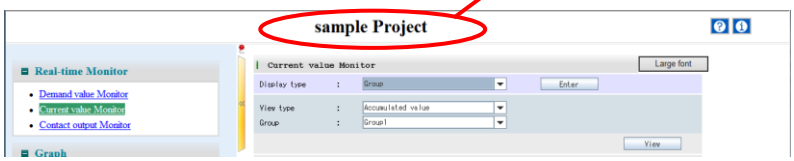
1 Displaying the [Creation project] dialog box

In the list in the project management dialog box,
Double-click [<Double-click here to register>].
or
Select [<Double-click here to register>], and click the [Open] button.



2 Entering items

Enter the following items.

[Project name]	Enter the name of a project that is to be registered in EcoWebServerIII. (The project name specified here is displayed in the EcoWebServerIII menu dialog box.) [EcoWebServerIII menu dialog box] **Project name** 

Characters	Up to 32 characters
Prohibited characters	The following characters cannot be registered # ¥ : , ; * ? " < > |
	A period cannot be used at the beginning or end of the project name.

*1 If you use any disallowed characters, which are listed in "Appendix: Disallowed Character List," the characters may not be displayed properly in the browser display of EcoWebServerIII.
*2 A project name that is the same as the existing one cannot be registered.
And "XMLTemplate" and "terminalConfig" can not be registered.

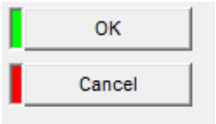
<table>
<tr><td>[IP address]</td><td>Enter the same value as the IP address that is specified in EcoWebServerIII.
(When a new project is being created, the default value "192.168.10.1" is automatically entered.)

[Range of configurable IP address]
<table><tr><th>Class</th><th>Leading IP address bits</th><th>Range of IP address</th></tr><tr><td>A</td><td>0</td><td>1.0.0.0 to 126.255.255.255</td></tr><tr><td>B</td><td>10</td><td>128.0.0.0 to 191.255.255.255</td></tr><tr><td>C</td><td>110</td><td>192.0.0.0 to 223.255.255.255</td></tr></table>*1 The following IP addresses cannot be configured.
・"0.0.0.0", "xxx.xxx.xxx.255" (xxx are any values)
・The same IP address as that of the client PC
*2 The same IP address as the one for other projects can be registered.</td></tr>
<tr><td>[Subnet mask]</td><td>Enter the same value as the subnet mask that is specified in EcoWebServerIII. (When a new project is being created, the default value "255.255.255.0" is automatically entered.)</td></tr>
<tr><td>[Gateway]</td><td>Enter the default gateway of the network to which EcoWebServerIII is connected.
*1 The following IP addresses cannot be configured.
"0.0.0.0", "xxx.xxx.xxx.255" (xxx are any values)
*2 This item is optional. Configure it only when necessary.</td></tr>
<tr><td>[Comment]</td><td>Enter a description of the project.
Characters Up to 32 characters
Prohibited characters The following characters cannot be registered:
¥ / : , ; * ? “ < > |

* This item is optional.</td></tr>
</table>

3 Registering the project

Click the button on the [Creation project] dialog box to register the project.

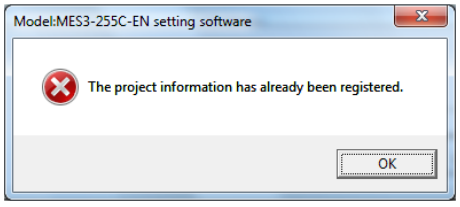


[OK] button : Registers the project based on the content of the entered items, and returns to the project management dialog box.
* If the project name is not entered, the [OK] button is disabled.

[Cancel] button : Discards the entered content, and returns to the project management dialog box.

* If there is an invalid value in the entered content, an error message as in the right figure is displayed according to the invalid content when the [OK] button is clicked.
Reenter the content so that the conditions described in "**2 Entering items**" will be satisfied.

(Example of display)



Remarks

- The IP address and subnet mask registered in the project management must be identical with those of EcoWebServerIII.
  ⇒Otherwise, the connection to EcoWebServerIII cannot be established, and the writing of the project and other operations cannot be performed.
- When you configure the settings for the first time after unpacking EcoWebServerIII from the shipping carton, register a new project by using the following values.
  IP address : **192.168.10.1** (factory default value)
  Subnet mask : **255.255.255.0** (factory default value)

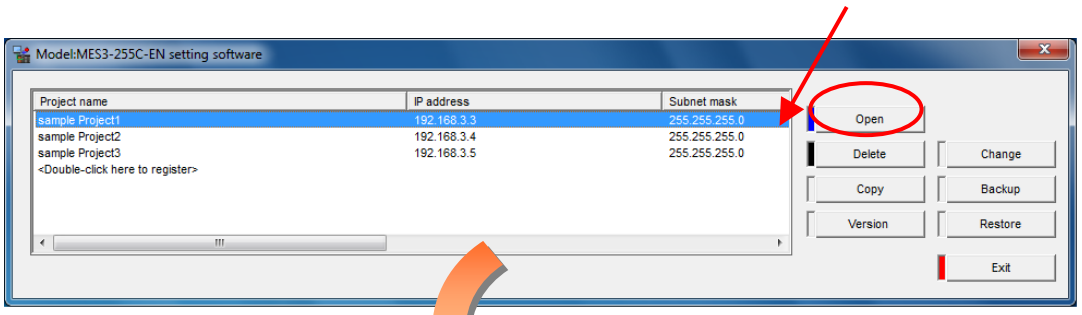
4.2.2. Opening a project

The procedures for opening the selected project are as follows:

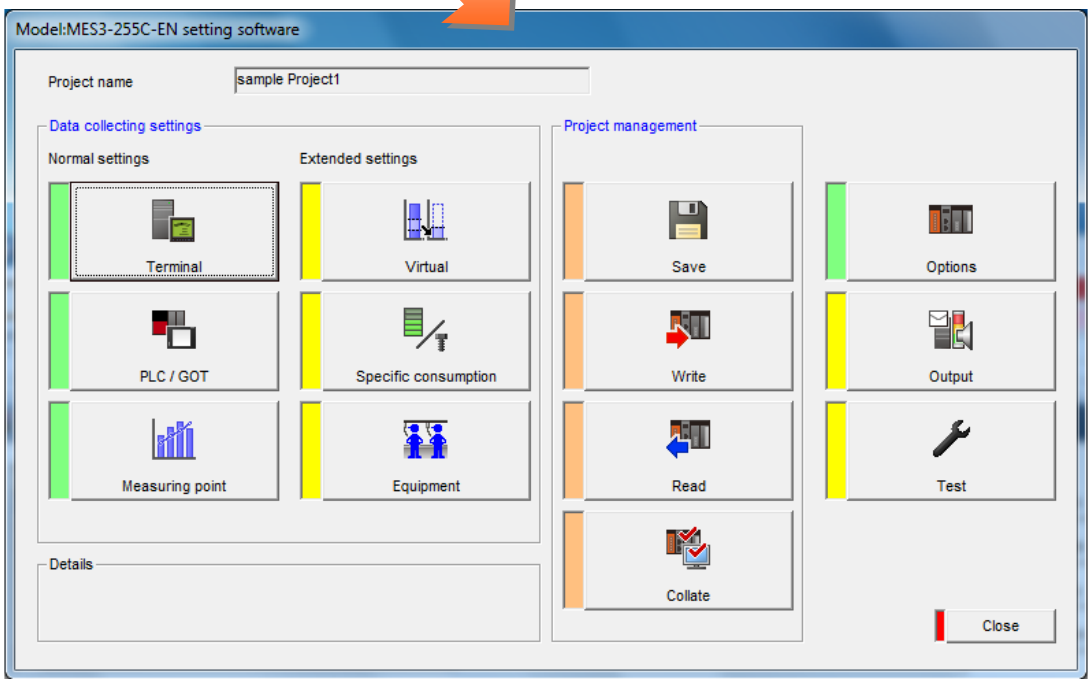
1 Selecting a project and opening the project settings dialog box

Double-click the line of a desired project in the list in the project management dialog box.
Or
Select the line of a desired project, and click the [Open] button.

Line of a desired project



[Project settings dialog box]



2 Closing the project

Click the [Close] button on the project settings dialog box and return to the project management dialog box.

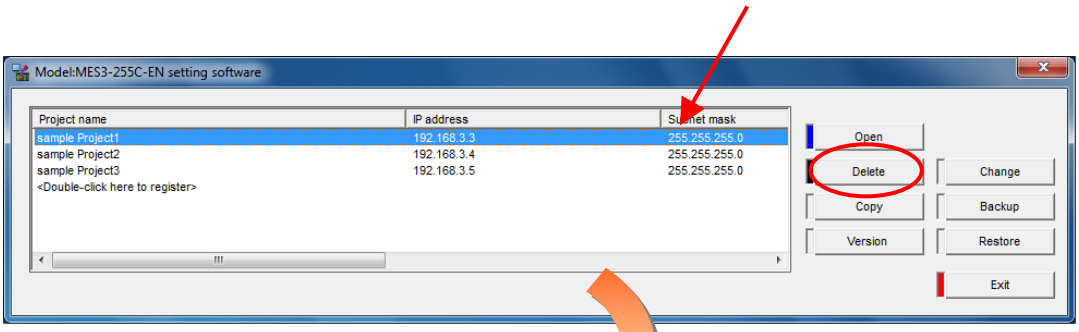
4.2.3. Deleting a project

The procedures for opening the selected project are as follows:

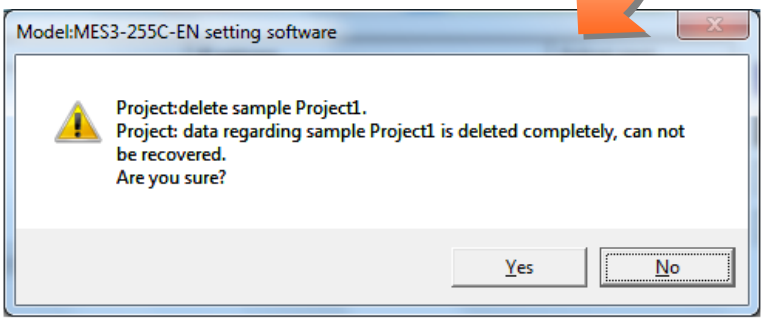
1 Selecting a project and clicking the [Delete] button

Select the line of a desired project in the list in the project management dialog box, and click the [Delete] button.

Line of a desired project



Deletion confirmation dialog box



2 Deleting the project

Click the button on the deletion confirmation dialog box to delete the project.

[Yes] button : Deletes the selected project, and returns to the project management dialog box.
[No] button : Cancels the deletion of the project, and returns to the project management dialog box.

Remarks

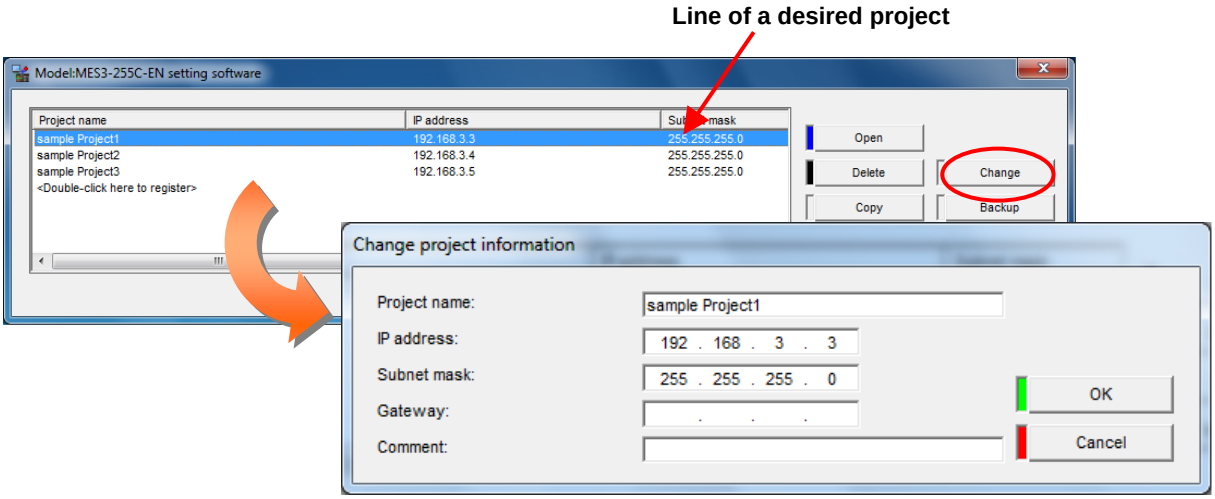
- When the project is deleted, all the data, including the setting values, is deleted. If you want to save the data, backup the project in advance. (☞ **Refer to 4.2.6 "Backing up projects."**)

4.2.4. Modifying the project information

The procedures for modifying the project information (Project name, IP address, Subnet mask, Gateway, and Comment) are as follows:

1 Displaying the [Change project information] dialog box

Select the line of a desired project in the list in the project management dialog box, and click the [Change] button.



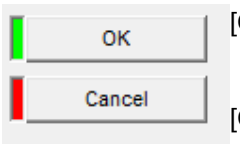
2 Entering the items to be modified

Enter the items to be modified.

* The items and conditions for entry is the same as in the registration of a new project.
(☞Refer to "4.2.1 Registering a new project.")

3 Registering the modified content

Click the button on the [Change project information] dialog box to register the project.

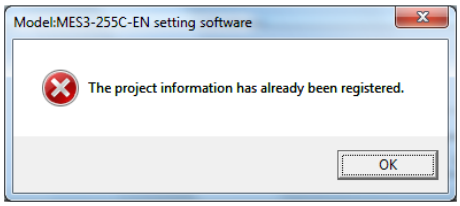


[OK] button : Registers the project based on the content of the modified items, and returns to the project management dialog box.
* If the project name is not entered, the [OK] button is disabled.

[Cancel] button : Discards the modified content, and returns to the project management dialog box.
* The original content before the modification is restored.

* If there is an invalid value in the entered content, an error message as in the right figure is displayed according to the invalid content when the [OK] button is clicked.
Reenter the content so that the conditions for each item will be satisfied.

(Example of display)



Remarks

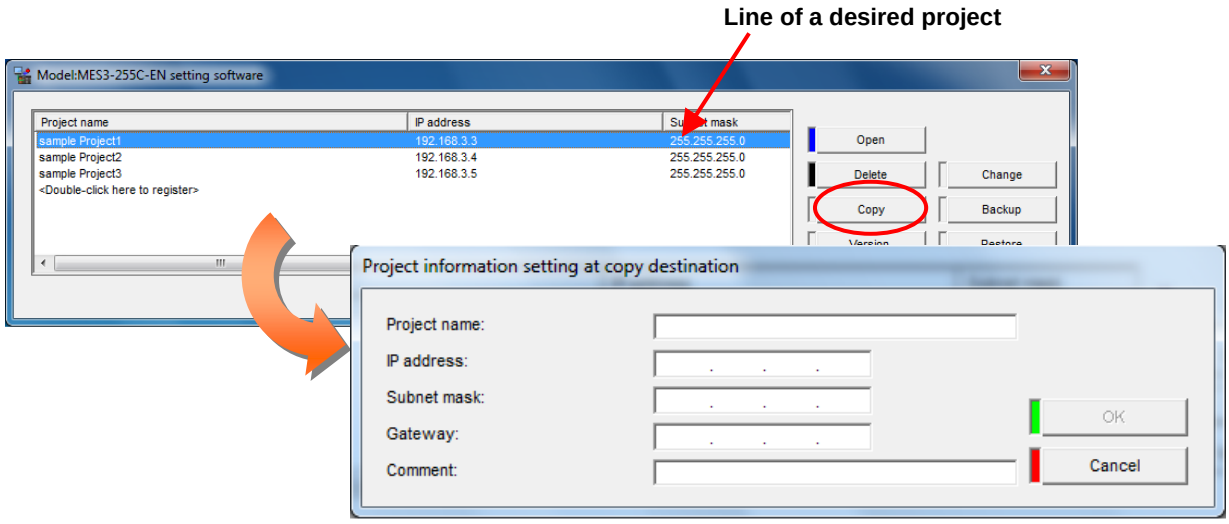
- **Even if the IP address, subnet mask, and default gateway are modified in the project management, the IP address, subnet mask, and default gateway of EcoWebServerIII are not modified.**
  How to modify the IP address, subnet mask, and default gateway of the unit?
  Refer to "4.7.1 IP address settings."

4.2.5. Copying a project

The procedures for copying a project are as follows:

1 Displaying the [Project information setting at copy destination] dialog box

Select a desired project in the list in the project management dialog box, and click the [Copy] button.
Set the project information of the destination in order to copy the contents of the selected projects.

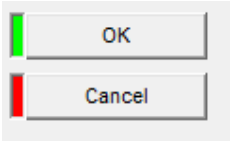


2 Entering the items of the copy destination

Enter the items.
* The items and conditions for entry is the same as in the registration of a new project.
(☞ Refer to "4.2.1 Registering a new project.")

3 Copying and registering the project

Click the button on the [Project information setting at copy destination] dialog box to register the project.

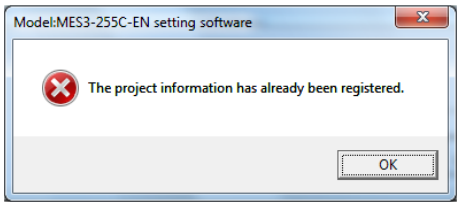


[OK] button : Registers the newly copied project, and returns to the project management dialog box.
* If the project name is not entered, the [OK] button is disabled.

[Cancel] button : Cancels the copy, and returns to the project management dialog box.

* If there is an invalid value in the entered content, an error message as in the right figure is displayed according to the invalid content when the [OK] button is clicked.
Reenter the content so that the conditions for each item will be satisfied.

(Example of display)



Remarks

- If 50 projects are already registered, no project can be copied.

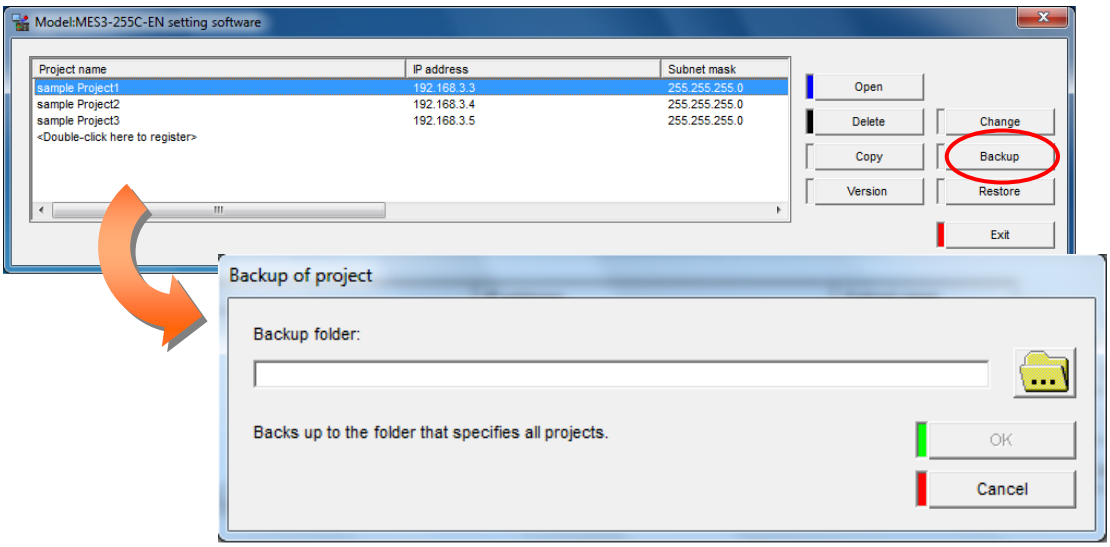
4.2.6. Backing up projects

The procedures for backing up the projects are as follows.
All the registered projects are to be backed up.

*** We recommend that the projects be backed up on another hard disk or memory so that the projects can be restored even if the projects are deleted by accident.**

1 Displaying the [Backup of project] dialog box

Click the [Backup] button on the project management dialog box.



2 Specifying the destination folder

(1) Enter the folder path of the destination directly.
or
(2) Click the [ ] button, and select the desired folder to specify the destination folder.

(1) When entering the path directly:

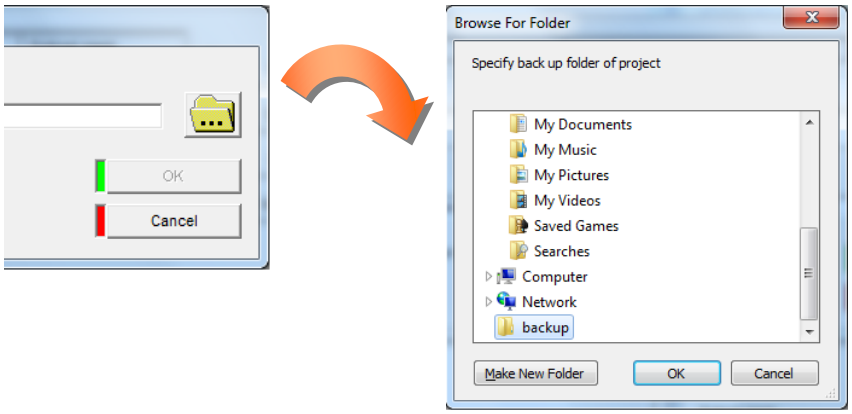
1. Enter the path directly in the [Backup folder] field.

The entry conditions are as follows:

Backup folder:	Path length	Up to 200 characters.
	Prohibited characters	The following characters cannot be registered: # , ; * ? " < > | /
		A period cannot be used at the beginning or end of the project name.
	*1: The drive name and alphabet characters are not case-sensitive.	
	*2: If the specified folder does not exist, and error will occur. Prepare the folder beforehand.	

(2) When selecting a desired folder by using the [Browse] button:

1. Click the [ ] button.
The [Browse For Folder] dialog box is displayed.



2. Select a destination folder and click a button to determine.

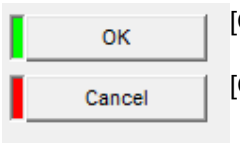
[OK] button : Specifies the selected folder as the destination.
The [Backup of project] dialog box is displayed, and the specified destination path is displayed in the [Backup folder] field.

[Cancel] button : Cancels the folder selection, and returns to the [Backup of project] dialog box.

[Make New Folder] button : Creates a new folder.

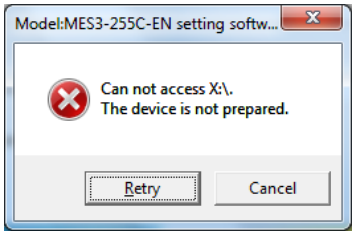
3 Performing the backup

(1) Click the button on the [Backup of project] dialog box.

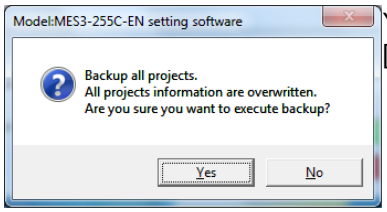


[OK] button : Performs the backup. (The backup confirmation dialog box is displayed.)
* If the destination folder path is not entered, the [OK] button is disabled.
[Cancel] button : Cancels the backup, and returns to the project management dialog box.

* If the device of the specified destination is not ready for use, a message as in the right figure is displayed.
Click the [Retry] button after the device is ready, or click the [Cancel] button to change the destination drive.

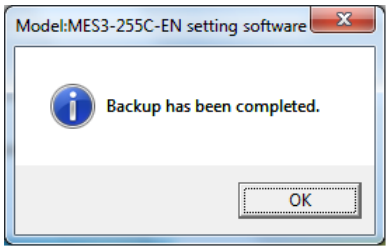


(2) Click the button on the backup confirmation dialog box.



Yes] button : Performs the backup.
[No] button : Cancels the backup, and returns to the project management dialog box.

(3) When the backup is successfully completed, the following message is displayed.
Click the [OK] button to return to the project management dialog box.



Remarks

- Even if the backup is performed, the current project is not deleted. However, if an older project set has already been backed up in the specified destination, it is overwritten and lost by the latest backup.

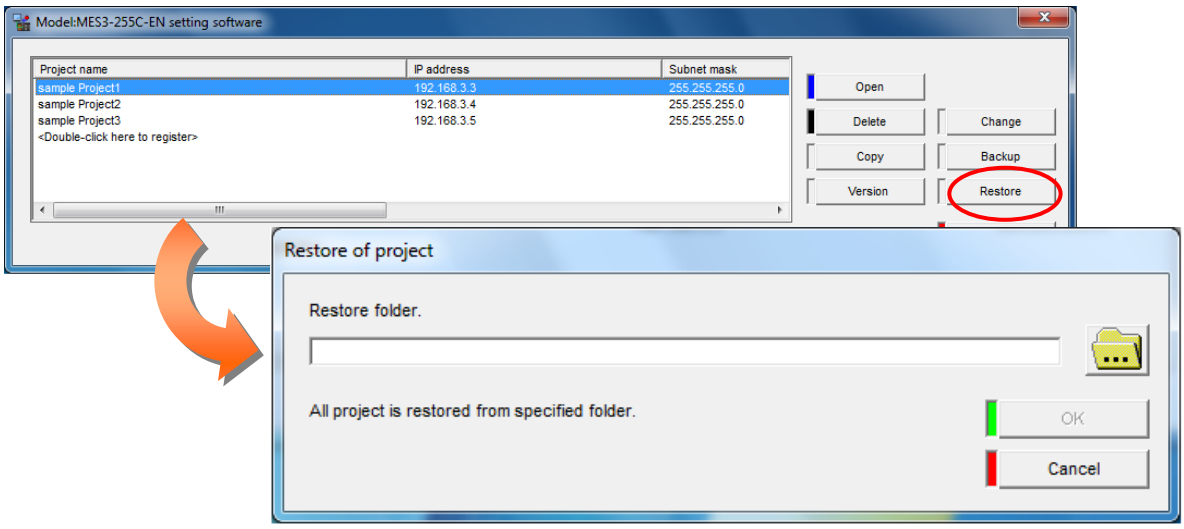
  How to restore the projects that have been backed up?
  Refer to "4.2.7 Restoring projects."

4.2.7. Restoring projects

The procedures for restoring the projects are as follows.
All the projects in the restoration source folder are to be restored.

1 Displaying the [Restore of project] dialog box

Click the [Restore] button on the project management dialog box.



2 Specifying the source folder

(1) Enter the folder path of the source directly.

Or

(2) Click the [ ] button, and select the desired folder to specify the source folder.

(1) When entering the path directly:

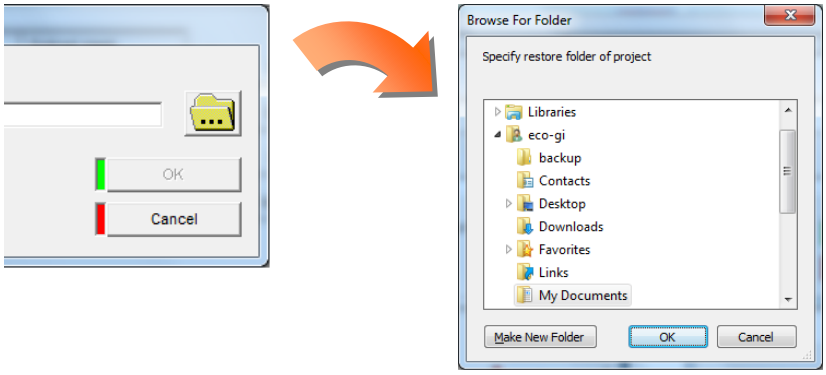
1. Enter the path directly in the [Restore folder] field.

The entry conditions are as follows:

Restore folder:	Path length	Up to 200 characters.
	Prohibited characters	The following characters cannot be registered: # , ; * ? “ < > | /
		A period cannot be used at the beginning or end of the project name.
	* The drive name and alphabet characters are not case-sensitive.	

(2) When selecting a desired folder by using the [Browse] button:

1. Click the [ ] button.
   The [Browse For Folder] dialog box is displayed.



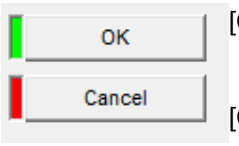
2. Select the source folder, and click the button.

   [OK] button : Specifies the selected folder as the source. The [Restore of project] dialog box is displayed, and the specified source path is displayed in the [Restore folder] field.

   [Cancel] button : Cancels the folder selection, and returns to the [Restore of project] dialog box.

3 Performing the restoration

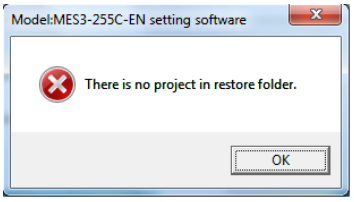
(1) Click the button on the [Restore of project] dialog box.



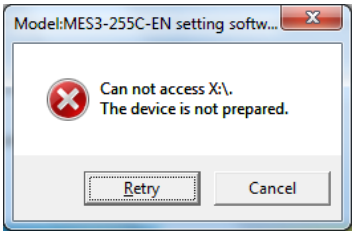
[OK] button : Performs the restoration.
(The restoration confirmation dialog box is displayed.)
* If the restore folder is not entered, the [OK] button is disabled.

[Cancel] button : Cancels the restoration, and returns to the project management dialog box.

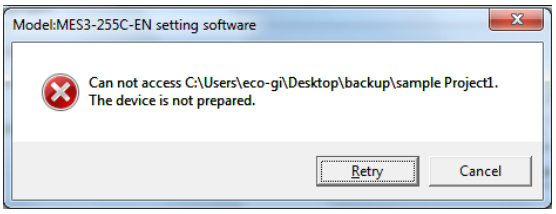
*1 If the project does not exist in the specified restore source, a message as in the right figure is displayed. Click the [OK] button and specify the correct restore source again.



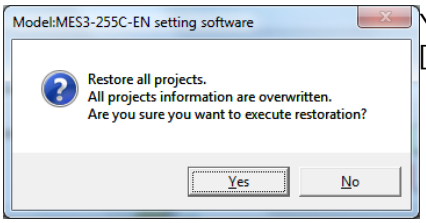
*2 If the folder specified as the source is not ready for use, a message as in the right figure is displayed.
Click the [Retry] button after the device is ready, or click the [Cancel] button to change the source drive.



*3 If no project data exists in the specified source folder, a message as in the right figure is displayed.
Click the [Cancel] button, and enter the correct source path.

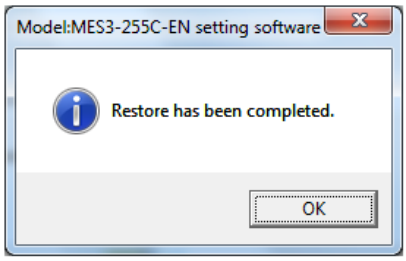


(2) Click the button on the restoration confirmation dialog box.



Yes] button : Performs the restoration.
[No] button : Cancels the restoration, and returns to the project management dialog box.

(3) When the restoration is successfully completed, the following message is displayed.
Click the [OK] button to return to the project management dialog box.



Remarks

- **When the backed-up projects are restored, they are added to the current projects. However, the current projects with the same name as those of the backed-up projects are overwritten. Note that the setting details will be overwritten with the contents of the backed up project.**
- **If the number of projects exceeds 50 after the restoration of projects, the 51st and subsequent projects are not restored.**

4.3. Demand control and Control Section Specifications (only with demand control function)

This section describes the demand control control functions.
Always read this section thoroughly before setting demand control, and set the function correctly.

4.3.1. Demand measuring function

The electric energy pulse input to the electric energy pulse signal input terminal is counted to calculate the integral electric energy and current demand.
In addition, the predicted demand, adjusted electrical power, permissible power and power limit are calculated from the current demand and remaining time.

Integrated electric energy

The integrated electric energy from the start of operation is calculated with the VCT ratio, pulse constant setting value and electric energy pulse input.

(1) Setting values related to integrated electric energy

Setting item	Setting range	Explanation
VCT ratio	1 to 100000	Scale for the VCT (meter transformer).
Pulse constant value	1 to 50000	Number of pulses per 1 kWh electric energy input into this device.
Multiplying factor	1 to 100000	Value multiplied with the value displayed on the meter when confirming the electric energy measured with the meter.
Number of digits	4 to 6	Number of digits in the electric energy integer displayed on the meter.

*** The meter multiplier and the number of meter digits does not need to be set when the multiplying factor is not set.**
*** Refer to "4.4.1 Demand basic settings" for details on the setting methods.**

Remarks

Setting the multiplying factor

By setting the multiplying factor ([Meter multiplier], [Number of meter digits]), this device will also calculate the integrated electric energy with the same meter rotation value (maximum value of integrated electrical power rate) as the transaction meter.
⇒ When synchronization with integrated electric energy measurement range is not required
Demand control is possible with the **simple settings** of just the [VCT ratio] and [Pulse constants].
(Always check the [Set multiplying factor] check box.)

(2) Measuring value

[1] Expression for integrated electric energy

The integrated electric energy is calculated with the following expression based on the preset VCT ratio and pulse constant.

$$\text{Integrated electrical power rate} = \text{No. of pulses from start} \times \frac{\text{VCT ratio}}{\text{Pulse constant}} \ [\text{kWh}]$$

[2] Multiplying factor (resolution) and maximum value of integrated electric energy

The integrated electric energy range depends on whether or not the multiplying factor is set.
(☞Refer to "**Reference [Setting the multiplying factor]**" on the previous page.)
The maximum integrated electric energy value when setting the multiplying factor is the maximum value of the meter.

<When setting the multiplying factor>

Max. value of integrated electric energy	Multiplying factor of integrated electric energy (10^n)	Conditions
$10^{(\text{Number of meter digits})} \times$ Meter multiplier $- 10^{(\text{Multiplying factor})}$	−3	Meter multiplier $\times 10^{(\text{No. of meter digits}-7)}$ <0.01
	−2	0.01 ≤ Meter multiplier $\times 10^{(\text{No. of meter digits}-7)}$ <0.1
	−1	0.1 ≤ Meter multiplier $\times 10^{(\text{No. of meter digits}-7)}$ <1
	0	1 ≤ Meter multiplier $\times 10^{(\text{No. of meter digits}-7)}$

A quick reference table of the maximum integrated electric energy value and multiplying factor is given below.

Meter multiplier	Number of meter digits: 4	5	6
1	9,999,999	99,999,99	999,999,9
2	19,999,999	199,999,99	1,999,999,9
:	:	:	:
8	79,999,999	799,999,99	7,999,999,9
9	89,999,999	899,999,99	8,999,999,9
10	99,999,99	999,999,9	9,999,999
11	109,999,99	1,099,999,9	10,999,999
12	119,999,99	1,199,999,9	11,999,999
:	:	:	:
98	979,999,99	9,799,999,9	97,999,999
99	989,999,99	9,899,999,9	98,999,999
100	999,999,9	9,999,999	99,999,999
101	1,009,999,9	10,099,999	100,999,999
102	1,019,999,9	10,199,999	101,999,999
:	:	:	:
998	9,979,999,9	99,799,999	997,999,999
999	9,989,999,9	99,899,999	998,999,999
1,000	9,999,999	99,999,999	999,999,999
1,001	10,009,999	100,099,999	999,999,999
1,002	10,019,999	100,199,999	999,999,999
:	:	:	:
9,999	99,989,999	999,899,999	999,999,999
10,000	99,999,999	999,999,999	999,999,999
10,001	100,009,999	999,999,999	999,999,999
:	:	:	:
99,999	999,989,999	999,999,999	999,999,999
100,000	999,999,999	999,999,999	999,999,999

Multiplying factor of integrated electric energy = −3
Multiplying factor of integrated electric energy = −2
Multiplying factor of integrated electric energy = −1
Multiplying factor of integrated electric energy = 0

(Example 1) When No. of meter digits =5, meter multiplier =100
Meter multiplier $\times 10^{(\text{No. of meter digits-7})} = 1$, integrated electric energy multiplying factor = $0(10^0)$
Maximum integrated electric energy value = $10^{(\text{No. of meter digits+1})} \times$ Meter multiplier $-10^{(\text{multiplying factor})}$ = 100,000 × 100 − 1 = 9,999,999,
Thus, the integrated electrical power rate is 0→1→2→・・・→9,999,998→9,999,999→0→1・・・.

(Example 2) When No. of meter digits=4, meter multiplier = 240
Meter multiplier $\times 10^{(\text{No. of meter digits-7})} = 0.24$ integrated electric energy multiplying factor = $-1(10^{-1})$
Maximum integrated electric energy value = $10^{(\text{No. of meter digits+1})} \times$ Meter multiplier $-10^{(\text{multiplying factor})}$ = 10,000 × 240 − 0.1 = 2,399,999.9.
Thus, the integrated electrical power rate is 0.0→0.1→0.2→・・・→2,399,999.8→2,399,999.9→0.0→0.1・・・.

<When not setting the multiplying factor>

Max. value of integrated electric energy	Multiplying factor of integrated electric energy (10^n)	Conditions
999.999	–3	VCT ratio = 1
9,999.99	–2	1 < VCT ratio ≤10
99,999.9	–1	10 < VCT ratio ≤100
999,999	0	100 < VCT ratio ≤1,000
9,999,999	1	1,000 < VCT ratio ≤10,000
99,999,999	2	10,000 < VCT ratio ≤100,000

(Example 1) When VCT ratio = 100
Maximum integrated electric energy value= 99,999.9
Integrated electric energy multiplying factor is –1(10^{-1})
Thus, the integrated electric energy is 0.0→0.1→0.2→・・・→99,999.8→99,999.9→0.0→0.1・・・.

(Example 2) When VCT ratio = 600
Maximum integrated electric energy value = 99,999.9
Integrated electric energy multiplying factor is 0(10^0)
Thus, the integrated electric energy is 0→1→2→・・・→999,998→999,999→0→1・・・.

Current Demand

The average electric energy (current demand) is calculated from the preset VCT ratio, pulse constant and demand time limit.

An example of the current demand when the demand time limit is 30 minutes is shown below.

(Example 1) When 120 kW electric energy is used for 30 minutes, the current demand after the demand time limit is 120 kW.

(Example 2) When 90 kW is used for 10 minutes and 150 kW is used for 20 minutes, the current demand after the demand time limit is 90x10/30+150x20/30=130 kW.

(1) Setting values related to current demand

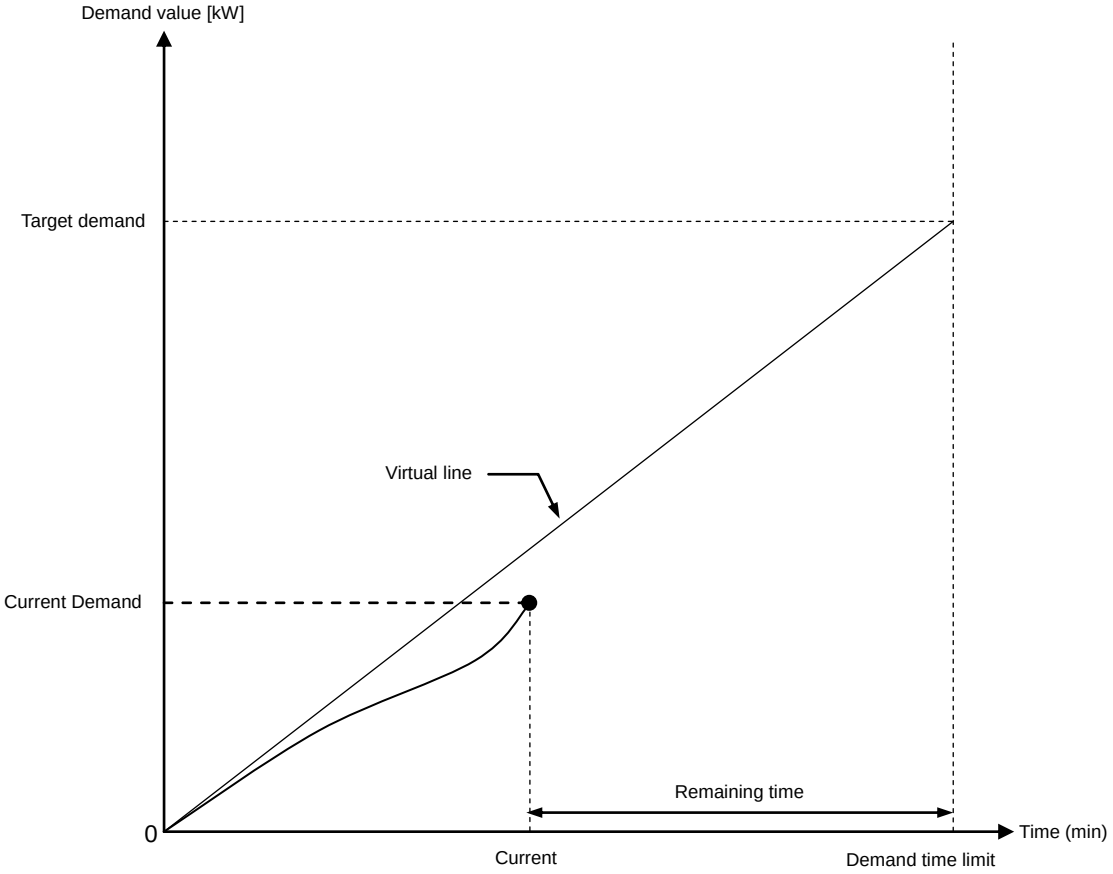
Setting item	Setting range	Explanation
Demand time limit	15, 30, 60 (minutes)	Demand time limit for demand control.
VCT ratio	1 to 100000	Scale for the VCT (meter transformer).
Pulse constant value	1 to 50000	Number of pulses per 1 kWh input into this device.
Multiplying factor	1 to 100000	Value multiplied with the value displayed on the meter when confirming the electric energy measured with the meter.
Number of digits	4 to 6	Number of digits in the electric energy integer displayed on the meter.

(2) Measuring value

[1] Expression for current demand

$$\text{Current demand} = \text{No. of pulses from start of time limit} \times \frac{\text{VCT ratio}}{\text{Pulse constant}} \times \frac{60}{\text{Demand time limit}} \text{[kW]}$$

A graph of the demand value (kW) and demand time limit (minutes) is shown below. The electric energy (No. of pulses from start of time limit x VCT ratio/pulse constant) [kWh] is averaged with the demand time limit [minutes], so even if a single electric energy pulse is not input from the current state to the end of the demand time limit, the current demand will not change.



Current Demand

[2] Multiplying factor (resolution) and maximum value of current demand

The current demand range depends on whether or not the multiplying factor is set.
(☞ See "**4.3.1 Demand measuring function, integrated electric energy "Remarks [Setting the multiplying factor]**" for details.)

<When setting the multiplying factor>

Maximum value of current demand	Multiplying factor of current demand multiplying factor (10^n)	Conditions
999.9999	n = –4	Meter multiplier $\times 10^{(\text{No. of meter digits}-7)}$ <0.01
9,999.999	n = –3	0.01≤ Meter multiplier $\times 10^{(\text{No. of meter digits}-7)}$ <0.1
99,999.99	n = –2	0.1 ≤ Meter multiplier $\times 10^{(\text{No. of meter digits}-7)}$ <1
999,999.9	n = –1	1 ≤ Meter multiplier $\times 10^{(\text{No. of meter digits}-7)}$

A quick reference table of the maximum current demand value and multiplying factor (10^n) is given below.

Meter multiplier	Number of meter digits: 4	5	6
1	999.9999	9,999.999	99,999.99
2	999.9999	9,999.999	99,999.99
:	:	:	:
8	999.9999	9,999.999	99,999.99
9	999.9999	9,999.999	99,999.99
10	9,999.999	99,999.99	999,999.9
11	9,999.999	99,999.99	999,999.9
12	9,999.999	99,999.99	999,999.9
:	:	:	:
98	9,999.999	99,999.99	999,999.9
99	9,999.999	99,999.99	999,999.9
100	99,999.99	999,999.9	999,999.9
101	99,999.99	999,999.9	999,999.9
102	99,999.99	999,999.9	999,999.9
:	:	:	:
998	99,999.99	999,999.9	999,999.9
999	99,999.99	999,999.9	999,999.9
1,000	999,999.9	999,999.9	999,999.9
1,001	999,999.9	999,999.9	999,999.9
1,002	999,999.9	999,999.9	999,999.9
:	:	:	:
9,999	999,999.9	999,999.9	999,999.9
10,000	999,999.9	999,999.9	999,999.9
10,001	999,999.9	999,999.9	999,999.9
:	:	:	:
99,999	999,999.9	999,999.9	999,999.9
100,000	999,999.9	999,999.9	999,999.9

Multiplying factor of current demand = −4

Multiplying factor of current demand = −3

Multiplying factor of current demand = −2

Multiplying factor of current demand = −3

Multiplying factor of current demand = −2

Multiplying factor of current demand = −2

Multiplying factor of current demand = −1

(Example 1) When No. of meter digits = 5, meter multiplier = 100
Meter multiplier × $10^{(\text{No. of meter digits}-7)}$ = 1, current demand multiplying factor = −1(10^{-1}),
Maximum current demand value = 999,999.9
Thus, the current demand is 0.0→0.1→0.2→・・・→999,999.8→999,999.9.

(Example 2) No. of meter digits = 4, meter multiplier = 240
Meter multiplier × $10^{(\text{No. of meter digits}-7)}$ = 0.24, current demand multiplying factor = −2(10^{-2}),
Maximum current demand value = 99,999.99
Thus, the current demand is 0.00→0.01→0.02→・・・→99,999.98→99,999.99.

<When not setting the multiplying factor>

Current demand range	Conditions
0.0 to 999,999.9	None (always)

(Example 1) When No. of meter digits = 5, meter multiplier = 100
Regardless of the No. of meter digits and meter multiplier setting, the current demand range is 0.0 to 999,999.9.
Thus, the current demand is 0.0→0.1→0.2→・・・→999,999.8→999,999.9.

Predicted Demand

The demand value (predicted demand) at the end of the demand time limit when the current load state continues is calculated.

(1) Settings related to predicted demand
The settings related to the predicted demand are the same as the current demand.
Refer to "**Current demand**" for details.

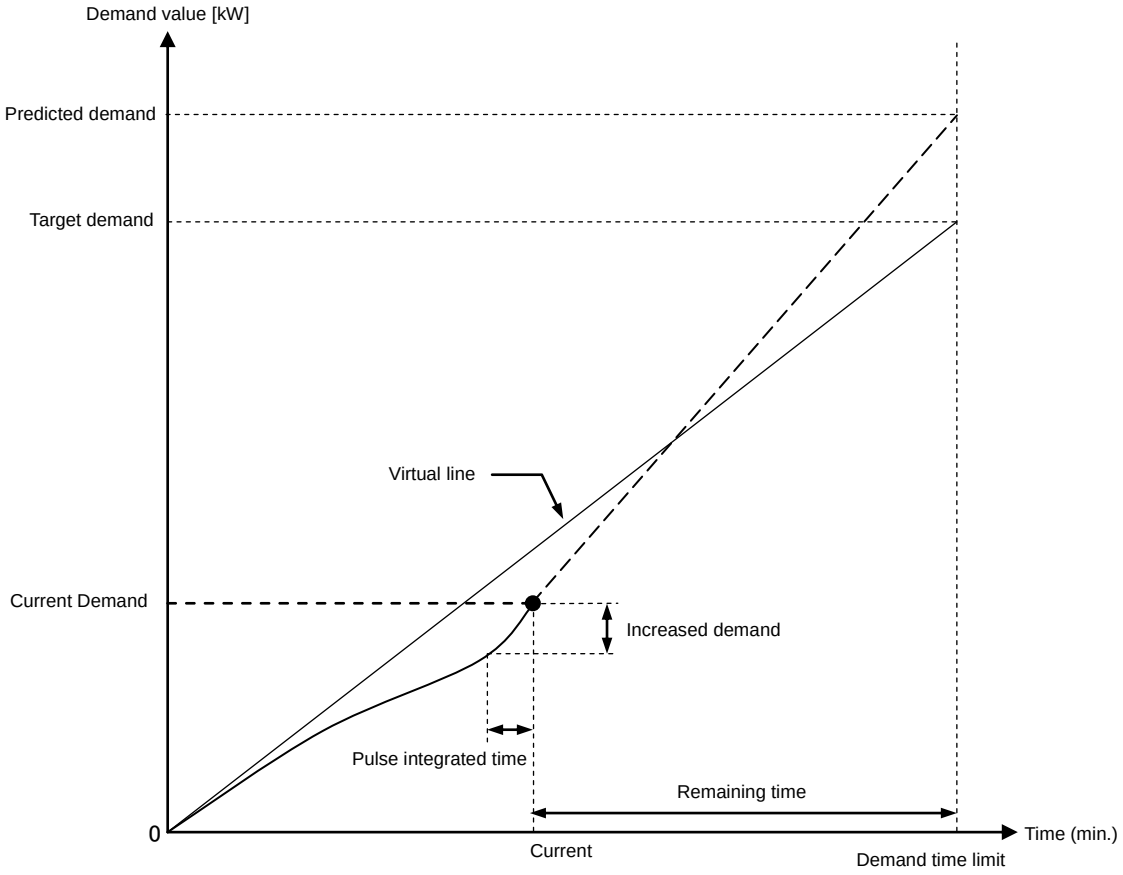
(2) Measuring value

[1] Expression for predicted demand

$$\text{Predicted demand} = \text{Current demand} + \frac{\text{Increased demand}}{\text{Pulse integrated time}} \times \text{Remaining time [kW]}$$

*1: The increased demand refers to the increase of current demand within the pulse-integrated time.

*2: The pulse-integrated time is as follows.
When remaining time is longer than 3 minutes: 3 minutes
When remaining time is less than 3 minutes: 1 minute



Predicted demand

[2] Resolution and maximum value of predicted demand
The predicted demand range is 0.0 to 999,999.9 [kW].

Adjusted electrical power

To make the demand value the target demand when demand time limit is completed, the electrical power (load value) (adjusted electrical power) that must be adjusted (turned on/off) from the current state must be calculated. If the adjusted electrical power <0, this means "excessive" and is an electrical power than must be shut off.

(1) Setting values related to adjusted electrical power

Setting item		Setting range	Explanation
Demand time limit		15, 30, 60 (minutes)	Demand time limit for demand control.
All day	Target demand	0.0 - 999999.9 kW	Set the demand electric energy used as target for demand time limit.
Time zone 1	Target demand	0.0 - 999999.9 kW	Set the demand electric energy used as target for demand time limit.
⋮	⋮	⋮	⋮
Time zone 10	Target demand	0.0 - 999999.9 kW	Set the demand electric energy used as target for demand time limit.

(2) Measuring value

[1] Expression for adjusted electrical power

$$\text{Adjusted electrical power} = (\text{Target demand} - \text{Predicted demand}) \times \frac{\text{Demand time limit}}{\text{Remaining time}} \text{ [kW]}$$

Since the target demand and predicted demand are the average electric energy within the demand time limit, the electrical power that must be adjusted within the remaining time can be expressed by multiplying the "target demand - predicted demand" by the "demand time delay/remaining time".

(Example 1) When demand time limit 30 minutes (1800 seconds), target demand 300.0 [kW], remaining time 900 seconds, and predicted demand 310.0 [kW]

$$\text{Adjusted electrical power} = (-10.0) \times \frac{1800}{900} = -20.0 \text{ [kW]}$$

When compared with the current load state, if the average 20.0 kW load is not reduced within the remaining time, this means that the demand value will exceed the target demand when the demand time delay finishes.

[2] Resolution and maximum value of adjusted electrical power

The adjusted electrical power range is −999999.9 to 999999.9 [kW].

Permissible Power

The electrical power (permissible power) that can be used in the remaining time is calculated from the current demand so that the demand value reaches the target demand when the demand time limit finishes.

(1) Setting values related to permissible power

Setting item		Setting range	Explanation
Demand time limit		15, 30, 60 (minutes)	Demand time limit for demand control.
All day	Target demand	0.0 to 999999.9 kW	Set the demand electric energy used as target for demand time limit.
Time zone 1	Target demand	0.0 to 999999.9 kW	Set the demand electric energy used as target for demand time limit.
⋮	⋮	⋮	⋮
Time zone 10	Target demand	0.0 to 999999.9 kW	Set the demand electric energy used as target for demand time limit.

(2) Measuring value

[1] Expression for permissible power

$$\text{Permissible power} = \times \frac{\text{Target demand} - \text{Current demand}}{\text{Remaining time}} \times \text{Demand time limit [kW]}$$

Since the target demand and current demand are the average electric energy within the demand time limit, the electrical power that must be adjusted within the remaining time can be expressed by multiplying the "target demand - current demand" by the "demand time delay/remaining time".

[2] Resolution and maximum value of permissible power

The permissible power range is 0.0 to 999999.9 [kW].

Power limit

The electrical power (power limit) that could exceed the target demand if operation is not performed with only the base power (load that cannot be shut off) is calculated.
This means that if the current demand exceeds the power limit, the target demand will be exceeded even if all loads other than the base power are shut off.

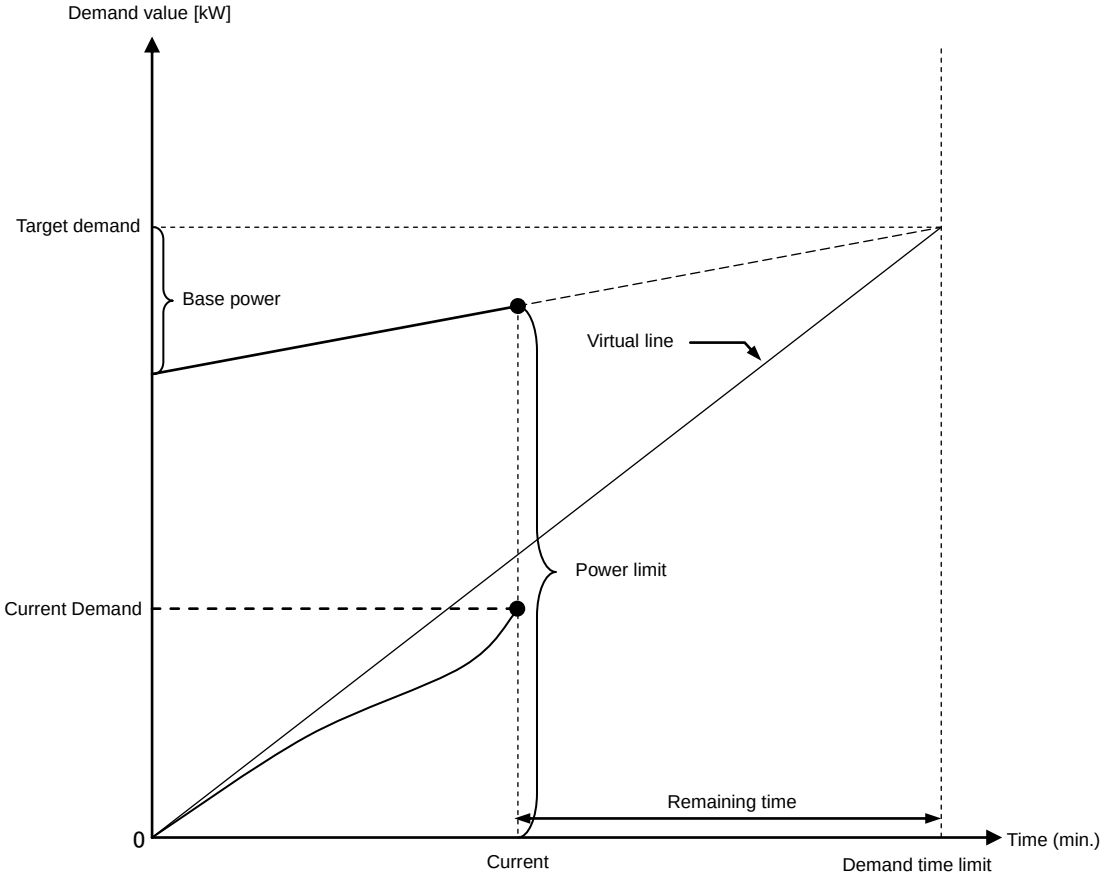
(1) Setting values related to power limit

Setting item		Setting range	Explanation
Demand time limit		15, 30, 60 (minutes)	Demand time limit for demand control.
All day	Target demand	0.0 to 999999.9 kW	Set the demand electric energy used as target for demand time limit.
	Base power	0.0 to 99999.9 kW	Set the load capacity that cannot be shut off. This is used to calculate the power limit.
Time zone 1	Target demand	0.0 to 999999.9 kW	Set the demand electric energy used as target for demand time limit.
	Base power	0.0 to 99999.9 kW	Set the load capacity that cannot be shut off. This is used to calculate the power limit.
⋮	⋮	⋮	⋮
Time zone 10	Target demand	0.0 to 999999.9 kW	Set the demand electric energy used as target for demand time limit.
	Base power	0.0 to 99999.9 kW	Set the load capacity that cannot be shut off. This is used to calculate the power limit.

(2) Measuring value

[1] Expression for power limit

$$\text{Power limit} = \text{Target demand} - \frac{\text{Base power}}{\text{Demand time limit}} \times \text{Remaining time [kW]}$$



Power limit

[2] Resolution and maximum value of power limit

The power limit range is 0.0 to 999999.9 [kW].

4.3.2. Demand control and alarm function

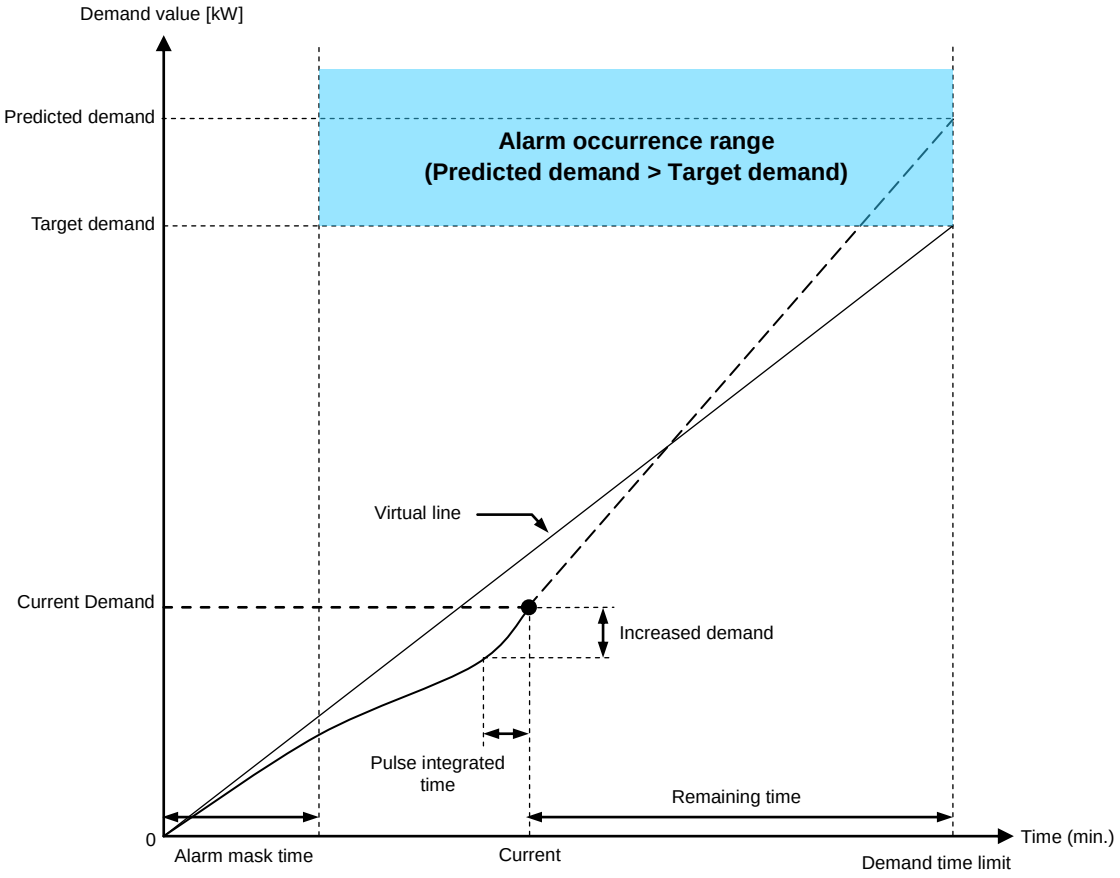
When the current demand, predicted demand, adjusted electrical power or power limit value satisfies the alarm occurrence conditions, an alarm (Level 1 alarm, Level 2 alarm, limit alarm, fixed alarm) occurs.

Level 1 alarm

This alarm occurs if the predicted demand is larger than the target demand (predicted demand > target demand). Occurrence of the Level 1 alarm means that the target demand will be exceeded if the current load state continues.

(1) Level 1 alarm occurrence/reset conditions

Item	Details
Occurrence conditions	The Level 1 alarm occurs when all of the following conditions are satisfied. - Predicted demand > Target demand - Target demand≠0 - Outside alarm mask time (remaining time < demand time limit - alarm mask time)
Reset conditions	The Level 1 alarm is reset when one of the following is satisfied. - Predicted demand ≤ Target demand - When demand time limit switches
Detection cycle	Detection/reset are carried out at a 10-second interval.



Level 1 alarm

(2) Setting values related to Level 1 alarm

Setting item		Setting range	Explanation
Alarm mask time		For 15-minute time limit 0 to 15 (minutes) For 30-minute time limit 0 to 30 (minutes) For 60-minute time limit 0 to 60 (minutes)	Set the time that each alarm (Level 1 alarm, Level 2 alarm, limit alarm, fixed alarm) is not output after the demand time limit starts.
All day	Target demand	0.0 to 999999.9 kW	Set the demand electric energy used as target for demand time limit.
Time zone 1	Target demand	0.0 to 999999.9 kW	Set the demand electric energy used as target for demand time limit.
⋮	⋮	⋮	⋮
Time zone 10	Target demand	0.0 to 999999.9 kW	Set the demand electric energy used as target for demand time limit.

Level 2 alarm

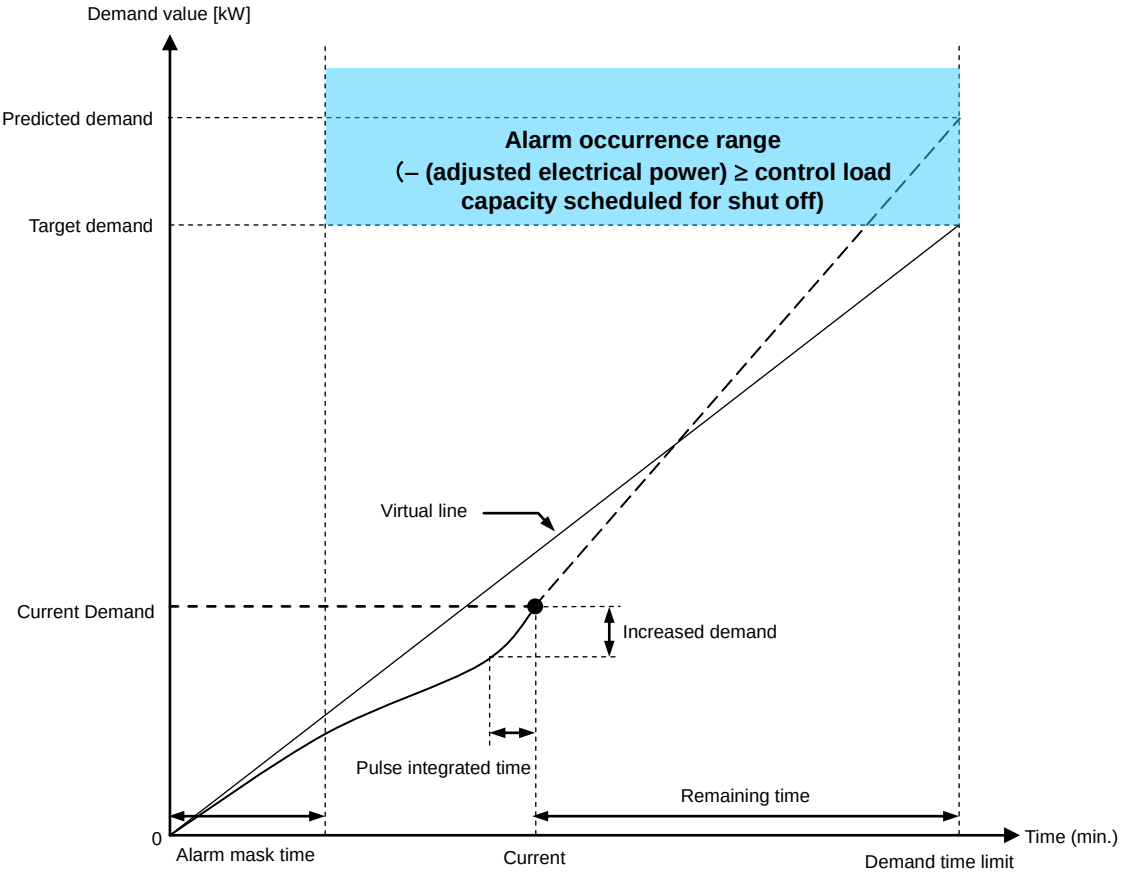
This alarm occurs when the adjusted electrical power (excessive amount) is higher than the control load capacity scheduled for shut off (– (adjusted electrical power) ≥ control load capacity scheduled for shut off). The control load capacity can be set in the range of 0.0 to 99999.9 [kW].
When the Level 2 alarm occurs, it means that the adjusted electrical power is excessive (negative value) even if the control No. scheduled for shut off is shut off.

* This function occurs only when demand control function is enabled.

(1) Level 2 alarm occurrence/reset conditions

Item	Details
Occurrence conditions	The Level 2 alarm occurs when all of the following conditions are satisfied. - – (adjusted electrical power) ≥ control load capacity scheduled for shut off (*1) - Order of priority for one or more control output≠0 - Target demand≠0 - Outside alarm mask time (remaining time < demand time limit - alarm mask time) - Remaining time > 0
Reset conditions	The Level 2 alarm is reset when one of the following is satisfied. - Adjusted electrical power >-（control load capacity scheduled for shut off） - When demand time limit switches
Detection cycle	Detection/reset are carried out at a 10-second interval.

*1: If all control output with a set order of priority have been shut off and there are no more to shut off, the control load capacity scheduled for shut off is handled as 0.



Level 2 alarm

(2) Setting values related to Level 2 alarm

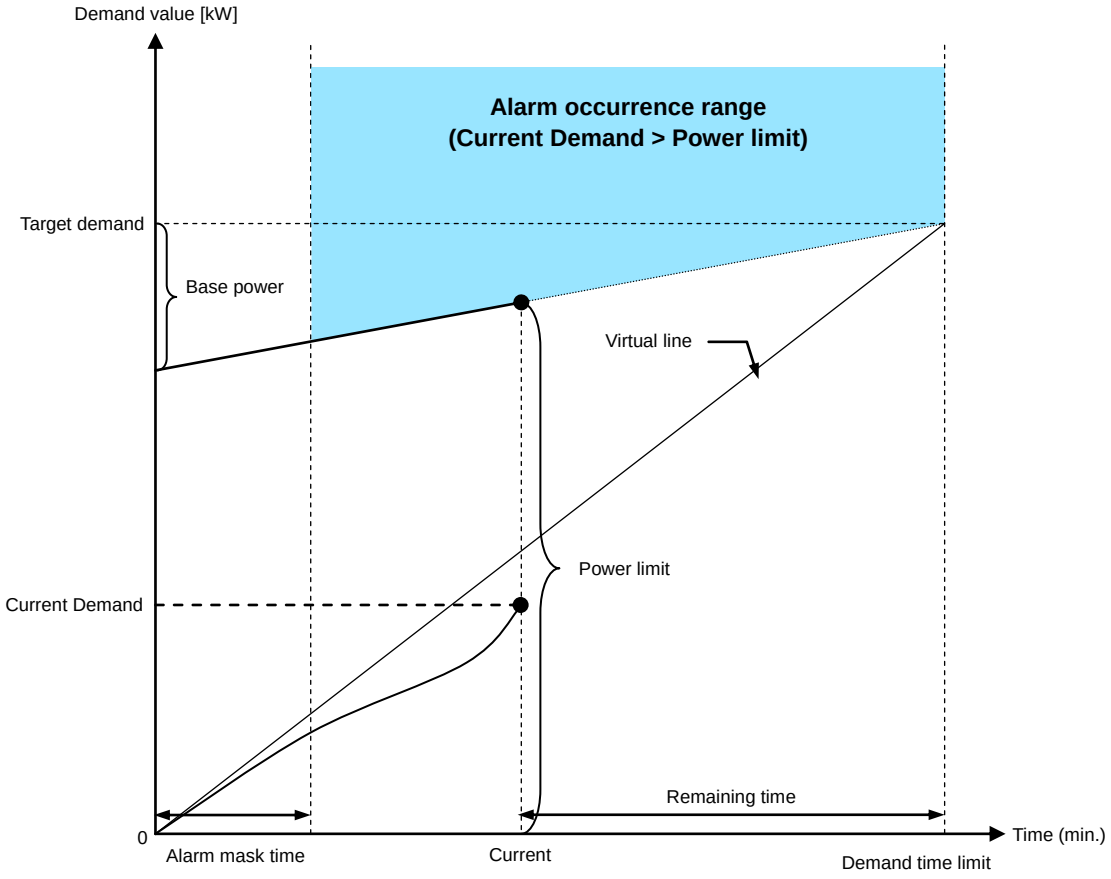
Setting item		Setting range	Explanation
Alarm mask time		For 15-minute time limit 0 to 15 (minutes) For 30-minute time limit 0 to 30 (minutes) For 60-minute time limit 0 to 60 (minutes)	Set the time that each alarm (Level 1 alarm, Level 2 alarm, limit alarm, fixed alarm) is not output after the demand time limit starts.
Control output 1	Order of priority	Invalid,1 to 12	Set the order of priority for shut off/turn on. The invalid control output is not shut off or turned on with demand control.
	Control load capacity	0.0 to 99999.9 kW	Set the load capacity of the control output to be shut off and turned on.
Control output 2	Order of priority	Invalid, 1 to 12	Set the order of priority for shut off/turn on. The invalid control output is not shut off or turned on with demand control.
	Control load capacity	0.0 to 99999.9 kW	Set the load capacity of the control output to be shut off and turned on.
⋮	⋮	⋮	⋮
Control output 12	Order of priority	Invalid, 1 to 12	Set the order of priority for shut off/turn on. The invalid control output is not shut off or turned on with demand control.
	Control load capacity	0.0 to 999999.9 kW	Set the load capacity of the control output to be shut off and turned on.
All day	Target demand	0.0 to 999999.9 kW	Set the demand electric energy used as target for demand time limit.
Time zone 1	Target demand	0.0 to 999999.9 kW	Set the demand electric energy used as target for demand time limit.
⋮	⋮	⋮	⋮
Time zone 10	Target demand	0.0 to 999999.9 kW	Set the demand electric energy used as target for demand time limit.

Limit alarm

This alarm occurs if the current demand is larger than the limit power (current demand > limit power), and can occur if alarm type is set to limit alarm.
This alarm means that the target demand will be exceeded even if all loads other than the base power are all shut off.

(1) Limit alarm occurrence/reset conditions

Item	Details
Occurrence conditions	The limit alarm occurs when all of the following conditions are satisfied. - Current Demand > Power limit - Alarm type＝Limit alarm - Target demand≠0 - Base power≠0 - Outside alarm mask time (remaining time < demand time limit setting value − alarm mask time) - Remaining time >0
Reset conditions	The limit alarm is restored when one of the following is satisfied. - Current Demand ≤ Power limit - When demand time limit switches
Detection cycle	Detection/reset are carried out at a 10-second interval.



Limit alarm

(2) Settings related to limit alarm

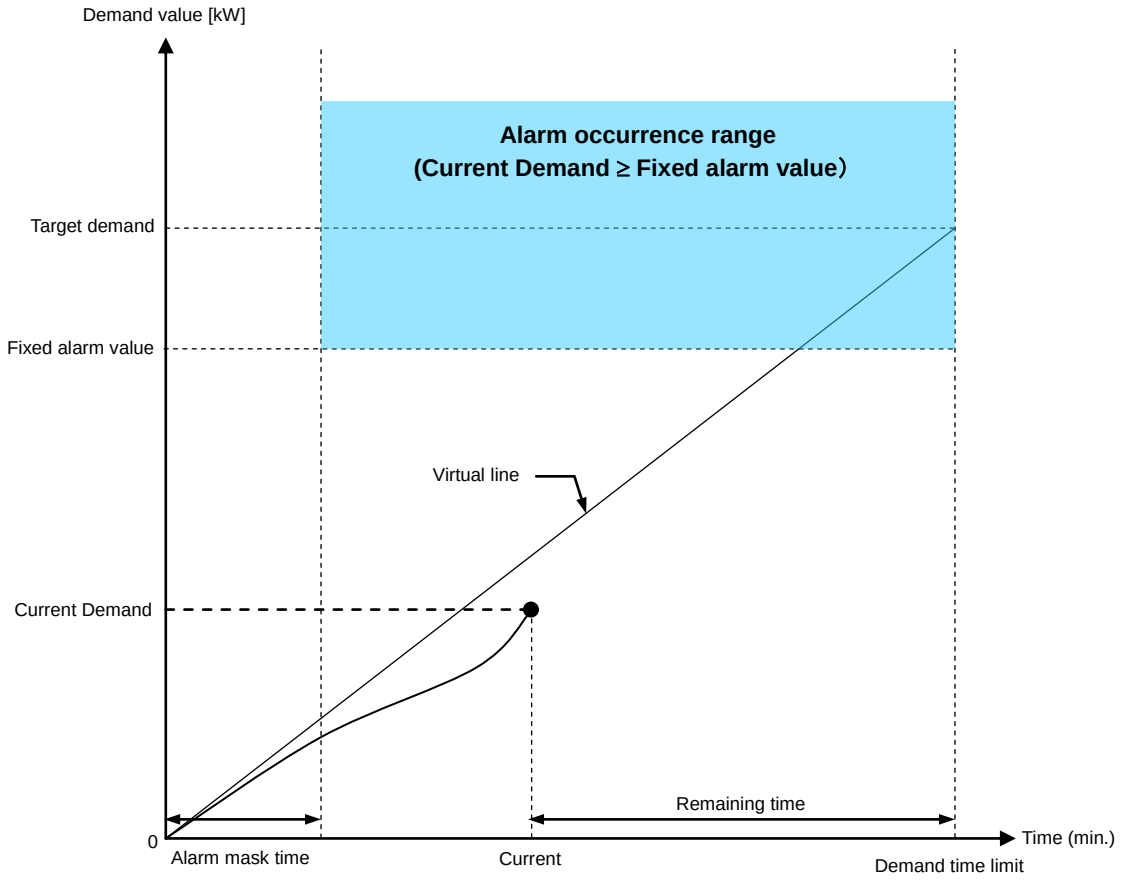
Setting item		Setting range	Explanation
Alarm type		Limit alarm, fixed alarm	Sets whether to detect the limit alarm or fixed alarm.
Alarm mask time		For 15-minute time limit 0 to 15 (minutes) For 30-minute time limit 0 to 30 (minutes) For 60-minute time limit 0 to 60 (minutes)	Set the time that each alarm (Level 1 alarm, Level 2 alarm, limit alarm, fixed alarm) is not output after the demand time limit starts.
All day	Target demand	0.0 to 999999.9 kW	Set the demand electric energy used as target for demand time limit.
	Base power	0.0 to 99999.9 kW	Set the load capacity that cannot be shut off. This is used to calculate the power limit.
Time zone 1	Target demand	0.0 to 999999.9 kW	Set the demand electric energy used as target for demand time limit.
	Base power	0.0 to 99999.9 kW	Set the load capacity that cannot be shut off. This is used to calculate the power limit.
⋮	⋮	⋮	⋮
Time zone 10	Target demand	0.0 to 999999.9 kW	Set the demand electric energy used as target for demand time limit.
	Base power	0.0 to 99999.9 kW	Set the load capacity that cannot be shut off. This is used to calculate the power limit.

Fixed alarm

This alarm occurs when the current demand is higher than the fixed alarm value (current demand ≥ fixed alarm value), and can occur if the alarm type is set to fixed alarm.
The fixed alarm value can be set in the range of 0 to 999,999.9 [kW].

(1) Fixed alarm occurrence/resetting conditions.

Item	Details
Occurrence conditions	The fixed alarm occurs when all of the following conditions are satisfied. - Current Demand ≥ Fixed alarm value - Alarm type＝Fixed alarm - Fixed alarm value≠0 - Outside alarm mask time (remaining time < demand time limit setting value - alarm mask time) - Remaining time > 0
Reset conditions	The fixed alarm is reset when the following is satisfied. - When demand time litmus ends (start)
Detection cycle	Detection/reset are carried out at a 10-second interval.



Fixed alarm

(2) Settings related to fixed alarm

Setting item		Setting range	Explanation
Alarm type		Limit alarm, fixed alarm	Sets whether to detect the limit alarm or fixed alarm.
Alarm mask time		For 15-minute time limit 0 to 15 (minutes) For 30-minute time limit 0 to 30 (minutes) For 60-minute time limit 0 to 60 (minutes)	Set the time that each alarm (Level 1 alarm, Level 2 alarm, limit alarm, fixed alarm) is not output after the demand time limit starts.
All day	Fixed alarm value	0.0 to 99999.9 kW	Sets the threshold value for generating the fixed alarm. When alarm type = 2 (fixed alarm), the fixed alarm value occurs if the current demand exceeds the fixed alarm value.
Time zone 1	Fixed alarm value	0.0 to 99999.9 kW	
⋮	⋮	⋮	
Time zone 10	Fixed alarm value	0.0 to 99999.9 kW	

4.3.3. Demand Control Function

The control outputs(loads) are shut off or turned on according to the control method settings. The control output subject to the shut off/turn on control are the control outputs set in the order of priority 1 to 12.
When a Level 2 alarm (or Level 1 alarm) occurs, the corresponding control output is shut off or turned on.
The order for shutting off and turning on, and the conditions for turning on differ according to the control method.

No.	Control method	Outline of operation
1	Cyclic - Reclosing	Each control output is shut off and turned on in order so that only a specific control output is not shut off. At the end of demand time limit, the control output currently shut off will be turned on at 5-second intervals in the order of higher priority.
2	Cyclic - Reclosing after Demand time limit	Each control output is shut off in order so that only a specific control output is not shut off. The shut off control output does not turn on until the end of demand time limit. At the end of demand time limit, the control output currently shut off will be turned on at 5-second intervals in the order of higher priority.
3	Cyclic - Reclosing after Reclosing interval	Each control output is shut off in order so that a specific control output is not shut off. However, control output will be turned on forcibly after a lapse of the reclosing time(has been set). It will be turned on independently of the end of the demand time limit. It will be shut off in the order of higher priority.
4	Priority order - Reclosing	The control outputs are shut off in order of highest priority. It will be shut off in the order of higher priority. It will be turned on in the order of lower priority. At the end of demand time limit, the control output currently shut off will be turned on at 5-second intervals in the order of lower priority.
5	Priority order - Reclosing after Demand time limit	The control outputs are shut off in order of highest priority. The shut off control output does not turn on until the end of demand time limit. It will be shut off in the order of higher priority. At the end of demand time limit, the control output currently shut off will be turned on at 5-second intervals in the order of lower priority.
6	Priority cyclic - Reclosing	The control outputs are shut off in order of highest priority and are turned on from the control output with longest shut off time. It will be shut off in the order of higher priority. It will be turn on in the long order of shut off time. Following, shut off in priority order, and turn on in the long order of shut off time. At the end of demand time limit, the control output currently shut off will be turned on in the long order of shut off time.

The setting values related to demand control are listed below.

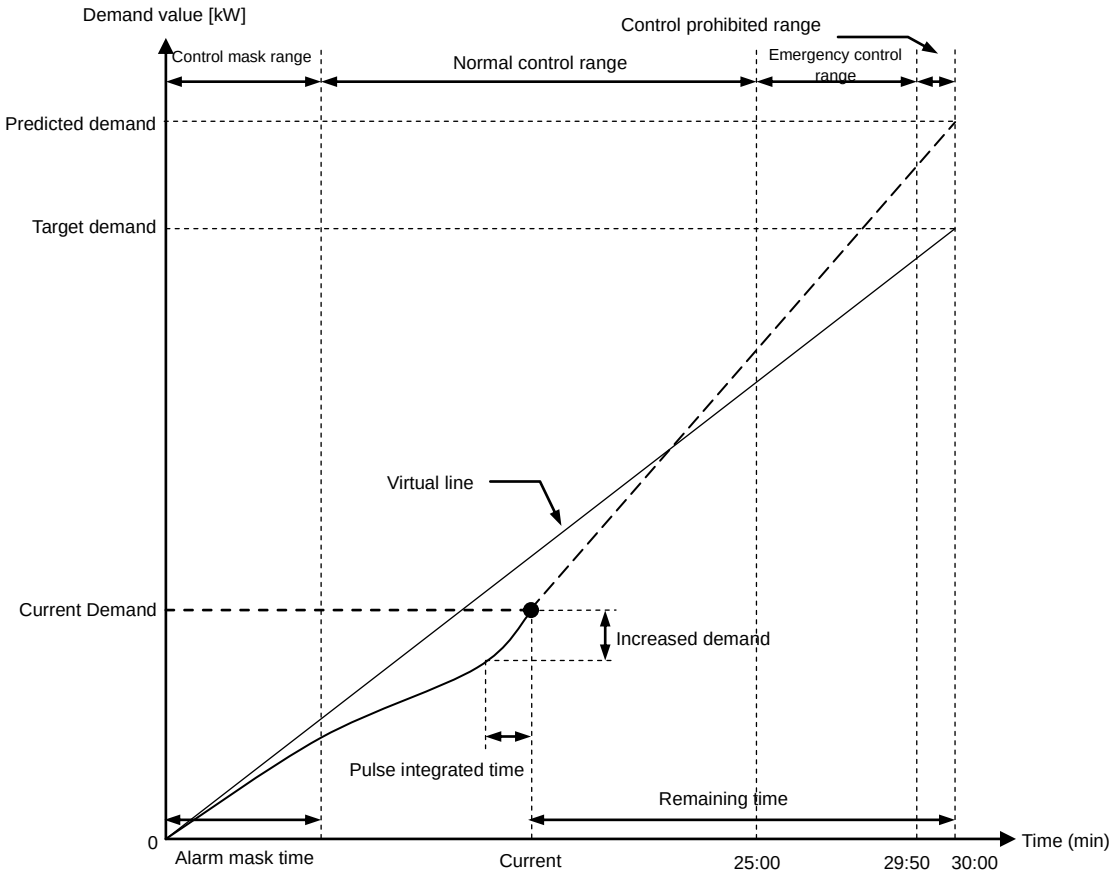
Setting item		Setting range	Explanation
Control method		Cyclic - Reclosing Cyclic - Reclosing after Demand time limit Cyclic - Reclosing after Reclosing interval Priority order - Reclosing Priority order - Reclosing after Demand time limit Priority cyclic - Reclosing	Sets the method for turning the control output off and on.
Alarm mask time		For 15-minute time limit 0 to 15 (minutes) For 30-minute time limit 0 to 30 (minutes) For 60-minute time limit 0 to 60 (minutes)	Set the time that each alarm (Level 1 alarm, Level 2 alarm, limit alarm, fixed alarm) is not output after the demand time limit starts.
Reclosing interval		For 15-minute time limit 0 to 15 (minutes) For 30-minute time limit 0 to 30 (minutes) For 60-minute time limit 0 to 60 (minutes)	Cyclic - Reclosing after Reclosing interval control, sets the time before turning the control output off and on after it is shut off with the demand control.
Control output	Order of priority	Invalid, 1 to 12	Set the order of priority for shut off/turn on. The invalid control output is not shut off or turned on with demand control.
	Control load capacity	0.0 to 99999.9 kW	Set the load capacity of the control output to be shut off and turned on.

(1) Shut off control

Regardless of the control method setting, the corresponding control output is shut off with the following conditions. The operation varies according to the remaining time.

Judgment of whether the shut off control conditions are satisfied or not is performed at a 10-second interval.

Range	Remaining time	Operation	
		Level 1 alarm occurring	Level 2 alarm occurring
Control mask	Demand time limit setting value (min.) | Demand time limit setting value (min.) − Alarm mask time	Shut off prohibited	Shut off prohibited
Normal control	Less than (demand time limit setting value (min.) − Alarm mask time) | 5 minutes		1 control output shut off (Shut off interval 30 sec. or longer)
Emergency control	Less than 5 minutes | 30 seconds		Multiple control numbers simultaneously shut off (Shut off interval 30 sec. or longer)
	Less than 30 seconds | 10 seconds	1 control output shut off (Shut off interval 10 sec. or longer)	Multiple control numbers simultaneously shut off (Shut off interval 10 sec. or longer)
Control prohibit	Less than 10 seconds	Shut off prohibited	Shut off prohibited



Example of 30-minute demand degree

[1] Control mask range

Within the alarm mask time, the control output is not shut off regardless of whether a Level 1 alarm or Level 2 alarm is occurring.

[2] Normal control range

The control output is shut off when the Level 2 alarm is occurring. One control output is shut off with one shut off control. (Note that control outputs with the same priority are shut off simultaneously.)
When shut off control is carried out in succession, the next shut off control is performed at least 30 seconds after the previous shut off control.

* Even during the normal control range, the shut off control is not performed until the shut off within the on control time limit on range is completed.

[3] Emergency control range

Multiple (one or more) control outputs are simultaneously shut off while the Level 2 alarm is occurring. When shut off control is carried out in succession, the next shut off control is performed at least 30 seconds after the previous shut off control.
When the remaining time is less than 30 seconds, the next shut off control is performed 10 seconds or more after the previous shut off control. Even if the Level 2 alarm is not occurring, shut off control is performed when the Level 1 alarm is occurring. If the control No. is shut off due to a Level 1 alarm occurrence, one control No. is shut off with one shut off control.
When shutting off multiple control outputs, the control outputs for which the "control load capacity scheduled for shut off" is the maximum (total of control load capacities scheduled for shut off is close to adjusted electrical power) are simultaneously shut off within the range that "- (adjusted electrical power) ≥ total of control load capacities scheduled for shut off) are simultaneously shut off.

<Example>

Adjusted power= –432 (kW)
Next control output (load 1) scheduled for shut off Load capacity = 150 (kW)
Next control output (load 2) scheduled for shut off Load capacity = 200 (kW)
Next control output (load 3) scheduled for shut off Load capacity = 100 (kW)

At this time, "– (150 + 200 + 100) < -432 < – (150 + 200)" is established, and control output (load 1) and control output (load 2) are shut off simultaneously.

[4] Control prohibited range

Shut off control is not performed when the remaining time is less than 10 seconds.

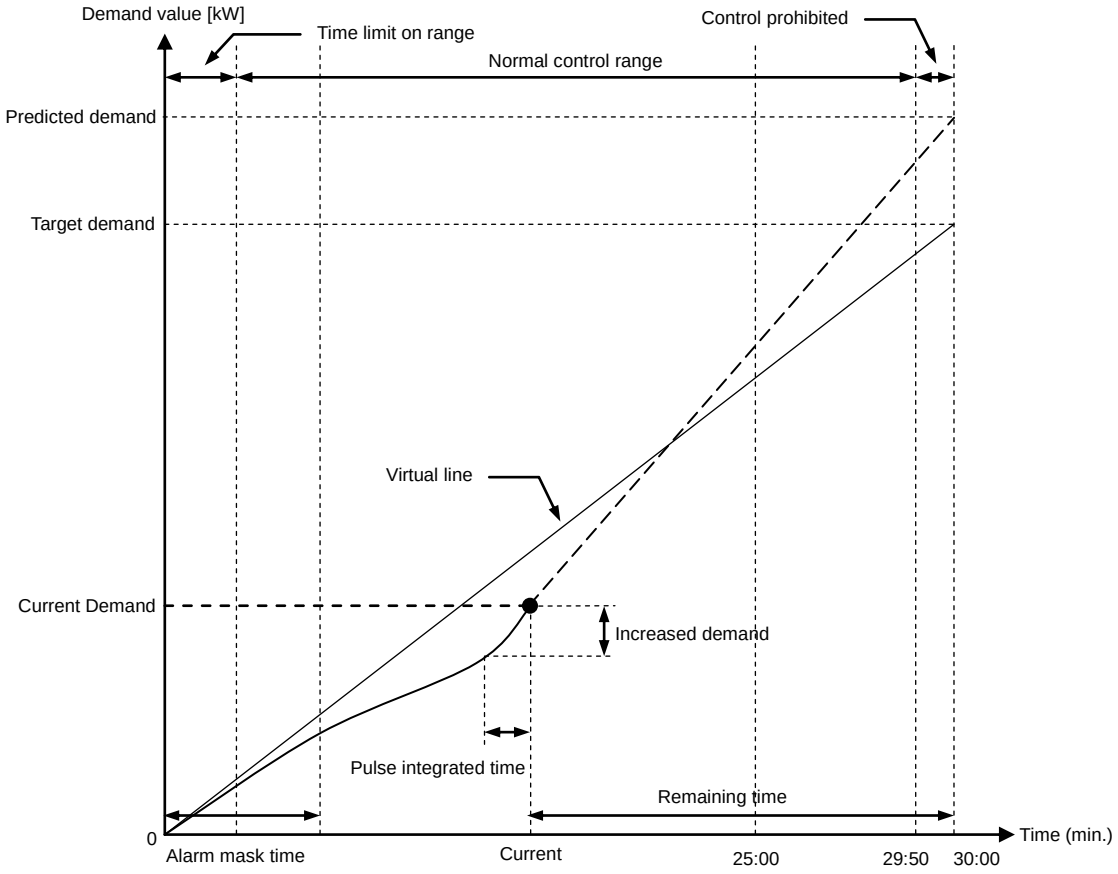
(2) On control

(a) Reclosing

When the control method is set to "Cyclic - Reclosing", "Priority order - Reclosing" or "Priority cyclic - Reclosing", the corresponding control output is turned on with the following conditions.

Judgment of whether the turn on control conditions are satisfied or not is performed at a 10-second interval in the control range. In the time limit on range, the turn on operation starts unconditionally at the start of the time limit.

Range	Remaining time	Operation
Time limit on	(Demand time limit switch) | Until all shut off control outputs are turned on	Conditions: None Operation: All shut off control outputs are turned on (Turn on interval 5 sec.)*
Normal control	Less than (time that all shut off control outputs have completed turn on) | 10 seconds	Conditions: Adjusted electrical power ≥ Control load capacity scheduled for turn on × 2 Operation: 1 control output on (Turn on interval 30 sec. or more)
Control prohibit	Less than 10 seconds	Conditions: None Operation: Turn on prohibited



Example of 30-minute demand degree

[1] Time limit on range
The control output shut off at when the demand time limit switches is unconditionally turned on. Turn on is performed at a 5 second interval. The control output turned on first is turned on when the time limit switches.

[2] Normal control range
The control output is turned on when the following expression is satisfied. One control output is turned on with one on control. (Note that control outputs with the same priority are turned on simultaneously.)

Adjusted electrical power $\geq$ control load capacity scheduled for on $\times$ 2

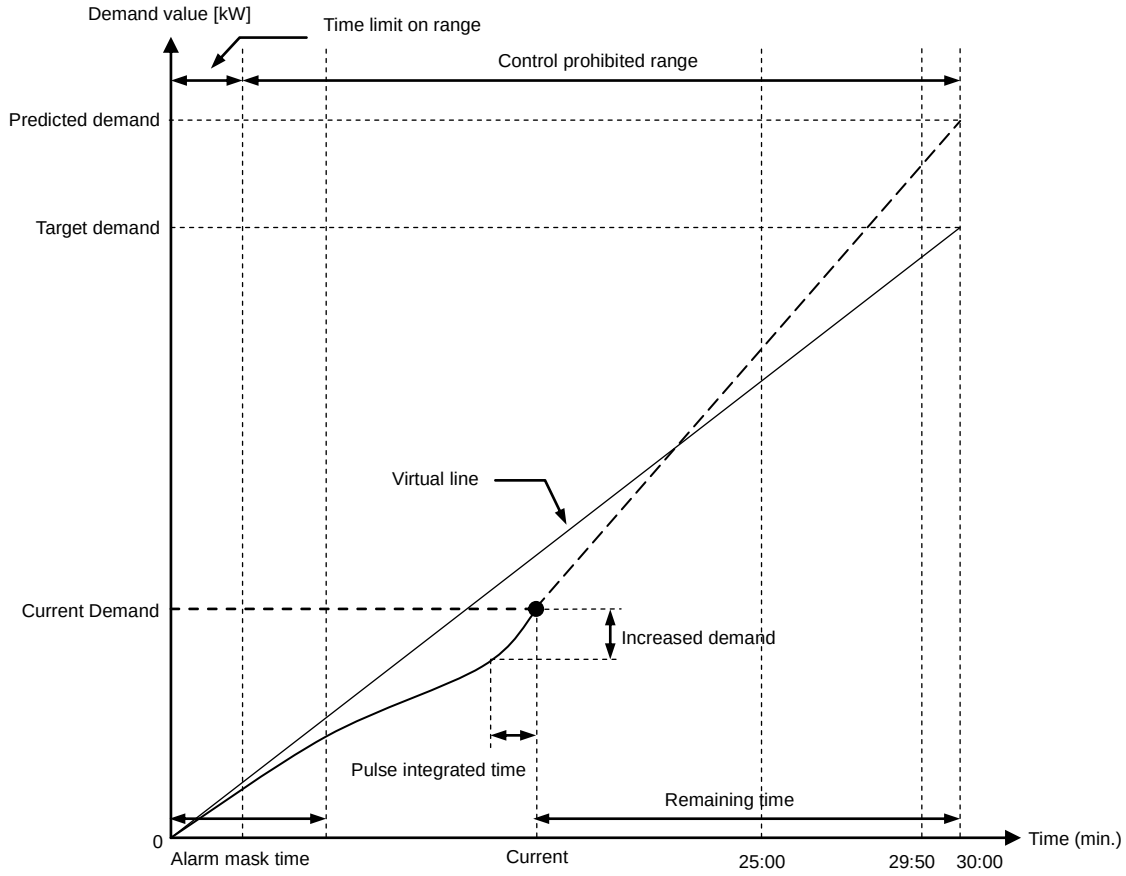
When on control is carried out in succession, the next on control is performed at least 30 seconds after the previous on control.

[3] Control prohibited range
On control is not performed when the remaining time is less than 10 seconds.

(b) Reclosing after Demand time limit

When the control method is "Cyclic - Reclosing after Demand time limit" or "Priority order − Reclosing after demand time limit", the corresponding control output is turned on with the following conditions.
In the time delay on range, the on operation starts conditionally when the time limit starts.

Range	Remaining time	Operation
Time limit on	(Demand time limit switch) | Until all shut off control outputs are turned on	Conditions: None Operation: All shut off control outputs are turned on (Turn on interval 5 sec.)*
Control prohibit	Less than (time that all shut off control outputs have completed turn on)	Conditions: None Operation: Turn on prohibited



Example of 30-minute demand degree

[1] Time limit on range
The shut off control output is unconditionally turned on when the demand time limit starts. The control output turned on first turns on when the time limit switches.

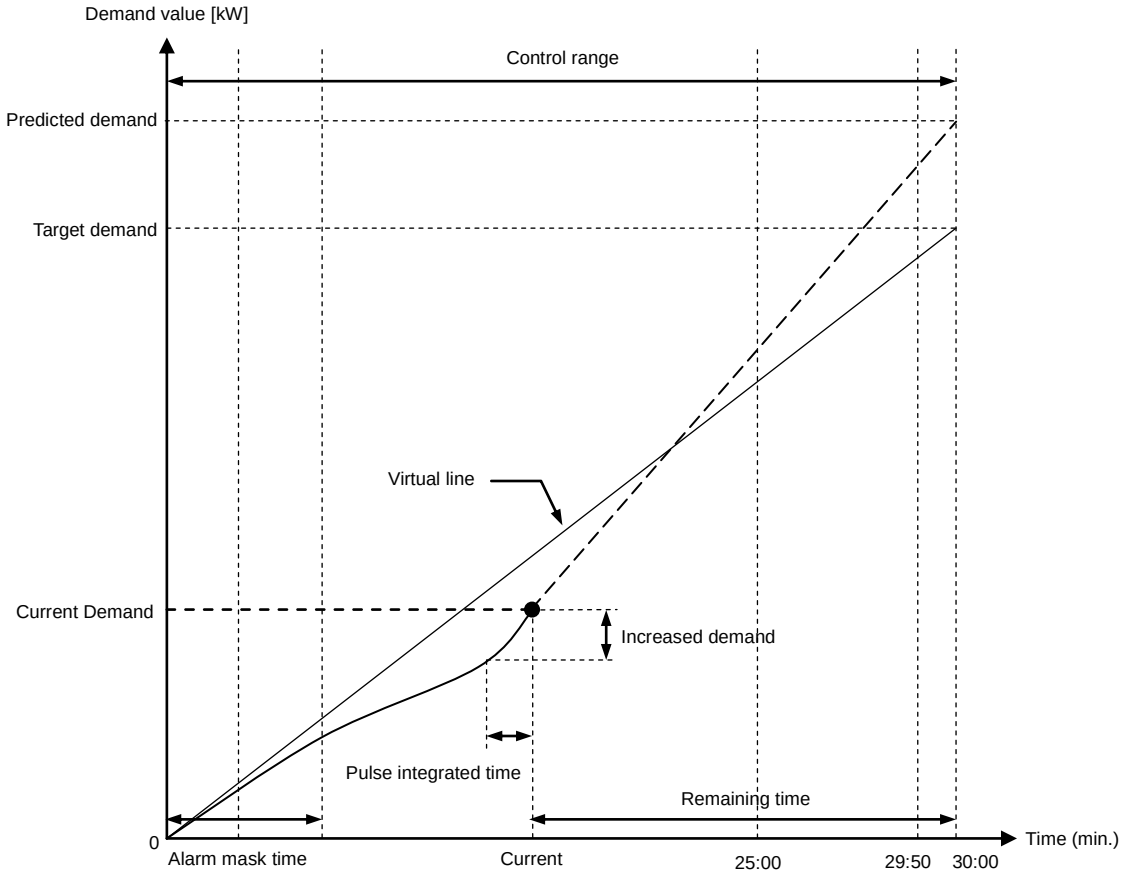
[2] Control prohibited range
On control is not performed after the time limit on is completed.

(c) Reclosing after Reclosing time

When the control method is set to "Cyclic – Reclosing after Reclosing interval", the corresponding control output is turned on with the following conditions.

Range	Remaining time	Operation
Control	– (Turns on at conditions on right regardless of remaining time)	Conditions: Set time has passed after shut off (*) Operation: On (Same interval as shut off)

*: The set time is the same as the “Reclosing interval” setting value.



Example of 30-minute demand degree

[1] Control range

The control output is turned on after a set time has passed after shut off. The time between shut off and turn on can be set with the off/on time.

One control output is turned on with one on control (note that control outputs shut off simultaneously are turned on simultaneously).

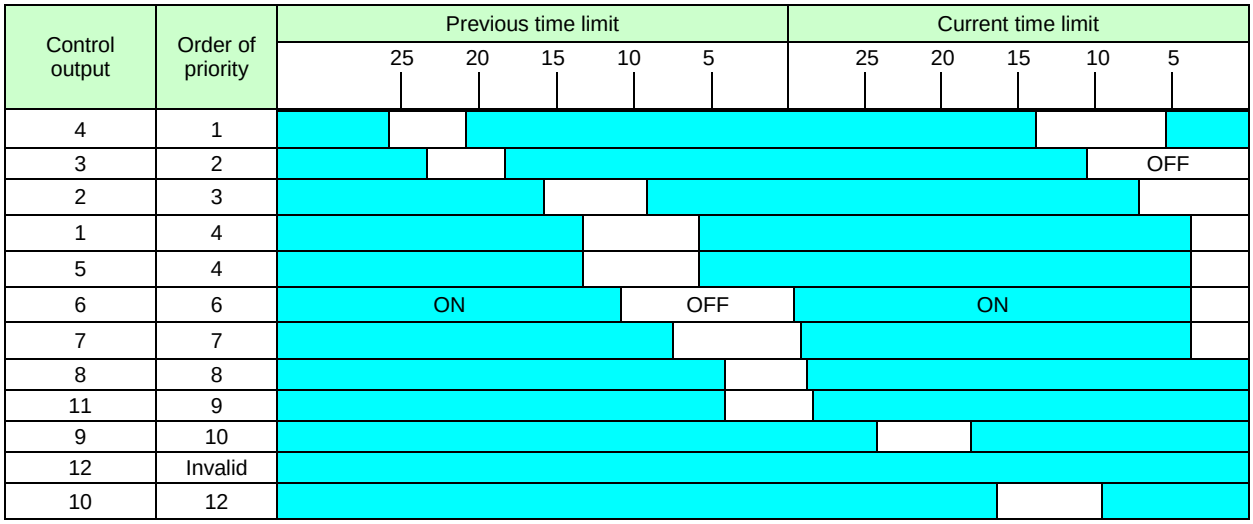
(3) Details of control methods

(a) Cyclic - Reclosing control

Each control output is shut off and turned on in order so that only a specific control output is not shut off.
A control output that has been manually controlled even once is excluded from the demand control target within that time limit.

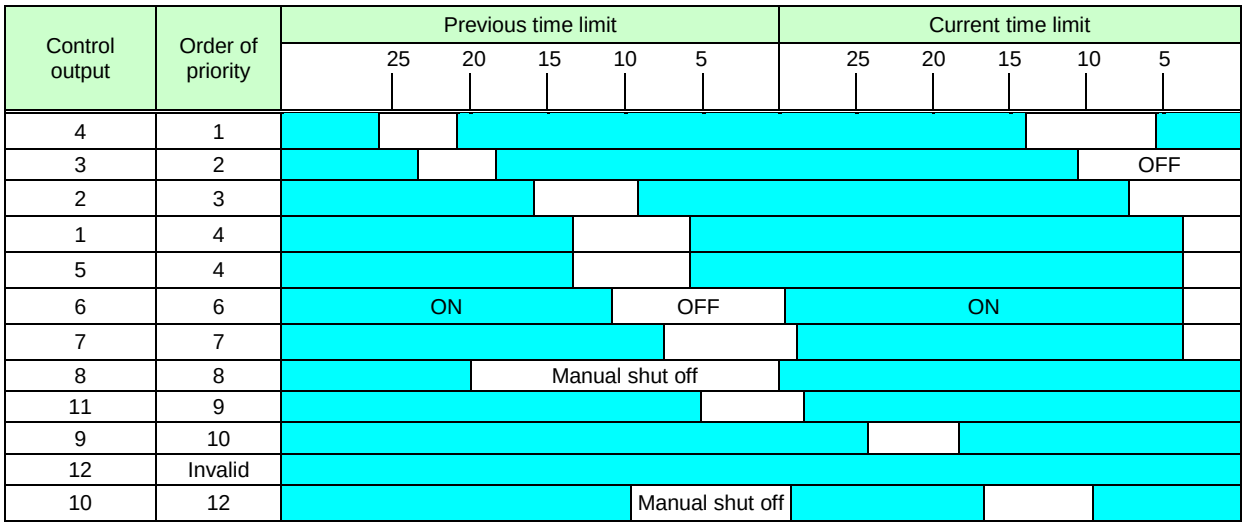
Shut off	Current time limit shut off control (Current demand time limit)	The control numbers are shut off in the order of priority. (Shut off in the order of 1→2→3→・・・→11→12→1→2・・・) When all control outputs from the oldest order of priority have been shut off, the system returns to the newest order of priority number, and shuts off the control outputs.
	Next time limit shut off control (Next demand time limit)	The next demand time limit is also shut off following the order of priority numbers. (At the next demand time limit, the shut off starts from the control output in the order of priority following the previous time limit.) * If the next order of priority number is manually controlled at the previous demand time limit, the shut off starts from the next control output in the order.
	Shut off control when the order of priority number setting is changed	If the priority setting is changed, shut off starts from the newest order of priority number at the demand time limit following the setting change.
Turned on	Current time limit turn on control (Current demand time limit)	Of the control outputs that are shut off, the control outputs are turned on from the number with the longest shut off time. If the control outputs have the same shut off time, they are turned on in the order of priority. (Turned on in the order of 1→2→3→・・・→11→12→1→2・・・)
	Next time limit turn on control (Next demand time limit)	When the next demand time limit starts, the control outputs are all turned on in order of longest shut off time including the control numbers that have been controlled manually. If the control outputs have the same shut off time, they are turned on in the order of priority. The control output shut off at the next demand time limit is turned on simultaneously as the “current time limit on control”.
	Turn on control when the order of priority number setting is changed	If the order of priority outputs have been changed from 1-12 to invalid, the changed control numbers are all turned on when the demand time limit switches. If the order of priority numbers have been changed (including when changed from 1-12 to invalid), or when the control method has been changed to off/on - cyclic control, all control outputs are turned on from the newest order of priority number when the demand time limit switches.

[1] Example of normal operation (Values in parentheses indicate the priority level numbers)
The control outputs are shut off in the order of priority number (1→2→3→・・・→9), and are turned on again in the order of longest shut off time (1→2→3→4). If the control outputs have the same order of priority, they are shut off simultaneously and turned on simultaneously. In this example, priority 8 and 9 are shut off the multiple control output simultaneously at emergency control region.
When the demand time limit ends (the next demand time limit starts), the control numbers that are shut off at the end of the demand time limit are turned on in order of the longest shut off time (6→7→8→9). These are turned on at a five-second interval. If the control outputs have the same shut off time, they are turned on in the order of the priority (8→9).
At the next demand time limit, the control numbers are turned off in the order of priority number (10→12) following those shut off at the previous time limit. After control No. 12, the newest control output in the order of priority is returned to and shut off (1→2→・・・).



Example of operation for off/on - cyclic control

[2] Example of operation during manual control (Values in parentheses indicate the priority numbers)
The control outputs are shut off in the order of priority number (1→2→3→・・・7). The order of priority number 8 control number is manually controlled, and thus is excluded from the demand control target. The next order of priority number (9) is shut off. With on control, the control outputs are turned on in order of longest shut off time (1→2→3→4).
When the demand time limit ends (the next demand time limit starts), the control numbers, including the manual shut off control number, are turned on in the order of the longest shut off time (8→6→12→7→9). These are turned on at a five-second interval.
At the next demand time limit, the control numbers are turned off in the order of priority number (10→12) following those shut off at the previous time limit. After control No. 12, the newest control number in the order of priority is returned to and shut off (1→2→・・・).



Example of operation during manual control

(b) Cyclic − Reclosing after Demand time limit control

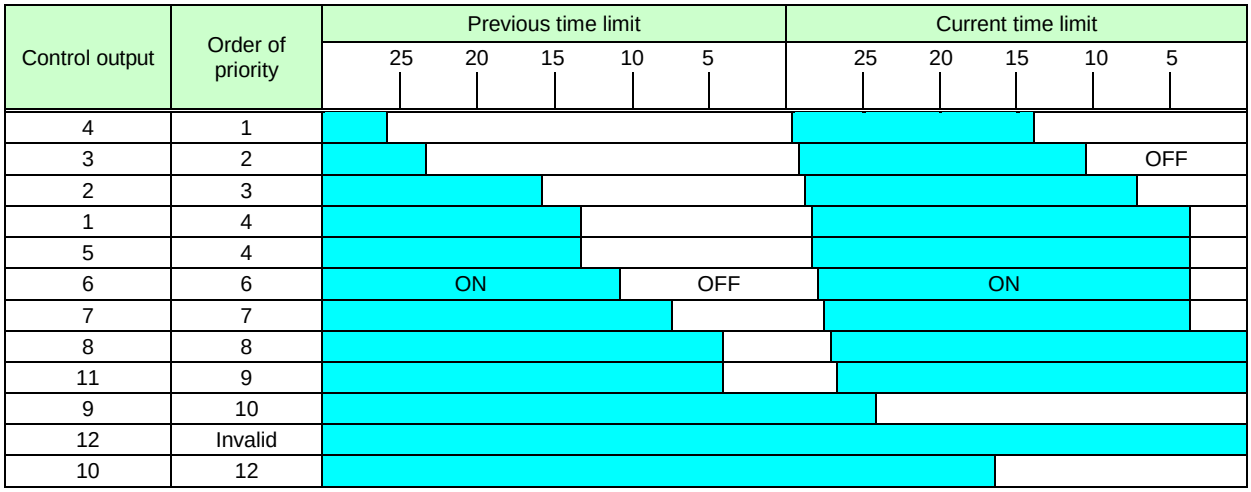
Each control output is shut off and turned on in order so that only a specific control output is not shut off.

A control output that has been shut off cannot be turned on again until the demand time limit switches.

A control output that has been manually controlled even once is excluded from the demand control target within that time limit.

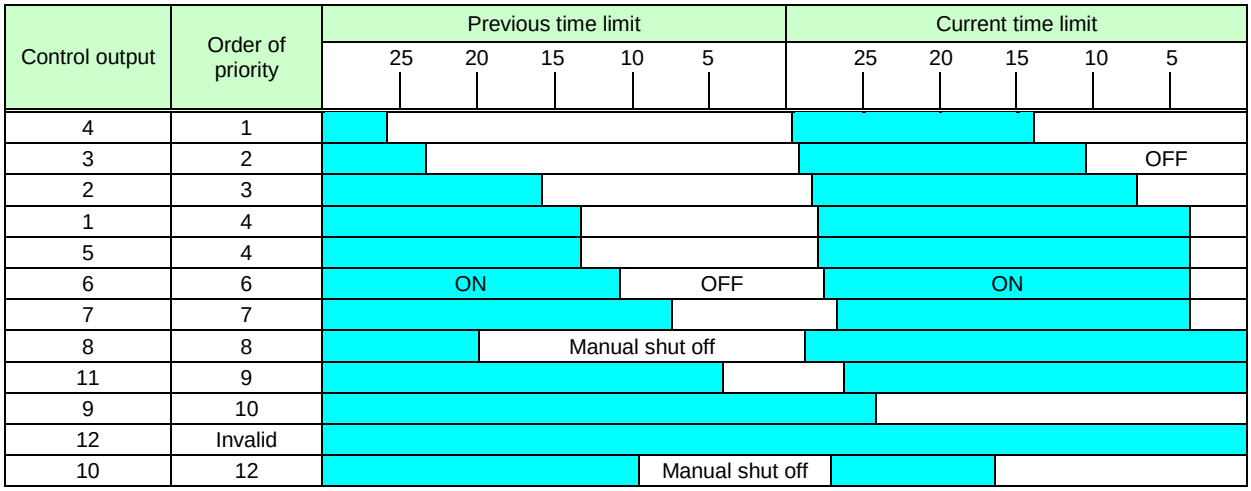
Shut off	Current time limit shut off control (Current demand time limit)	The control numbers are shut off in the order of priority. (Shut off in the order of 1→2→3→・・・→11→12→1→2・・・) When all control numbers from the oldest order of priority have been shut off, the system returns to the newest order of priority output, and shuts off the control outputs.
	Next time limit shut off control (Next demand time limit)	The next demand time limit is also shut off following the order of priority numbers. (At the next demand time limit, the shut off starts from the control output in the order of priority following the previous time limit.) * If the next order of priority output is manually controlled at the previous demand time limit, the shut off starts from the next control output in the order.
	Shut off control when the order of priority number setting is changed	If the priority setting is changed, shut off starts from the newest order of priority number at the demand time limit following the setting change.
Turned on	Current time limit turn on control (Current demand time limit)	Cannot be turned on until the demand time limit ends.
	Next time limit turn on control (Next demand time limit)	When the next demand time limit starts, the control outputs are all turned on in order of longest shut off time including the control numbers that have been controlled manually. If the control outputs have the same shut off time, they are turned on in the order of priority. The control output shut off at the next demand time limit is turned on simultaneously as the “current time limit on control”.
	Turn on control when the order of priority number setting is changed	If the order of priority numbers have been changed from 1-12 to invalid, the changed control outputs are all turned on when the demand time limit switches. If the order of priority outputs have been changed (including when changed from 1-12 to invalid), or when the control method has been changed to time limit on - cyclic control, all control outputs are turned on from the newest order of priority number when the demand time limit switches.

[1] Example of normal operation (Values in parentheses indicate the priority level numbers)
The control numbers are shut off in the order of priority output (1→2→3→・・・→9). Control numbers with the same order of priority are shut off simultaneously. These cannot be turned on within the demand time limit in which they were shut off. In this example, priority 8 and 9 are shut off the multiple control output simultaneously at emergency control region.
When the demand time limit ends (the next demand time limit starts), the control outputs that are shut off at the end of the demand time limit are turned on in order of the longest shut off time (1→2→3→・・・9). These are turned on at a five-second interval. If the control outputs have the same shut off time, they are turned on in order of the priority (8→9).
At the next demand time limit, the control outputs are turned off in the order of priority number (10→12) following those shut off at the previous time limit. After control No. 12, the newest control output in the order of priority is returned to and shut off (1→2→・・・).



Example of operation for time limit on - cyclic control

[2] Example of operation during manual control (Values in parentheses indicate the priority numbers)
The control outputs are shut off in the order of the priority number (1→2→3→・・・7). The order of priority number 8 control output is manually controlled, and thus is excluded from the demand control target. The next order of priority number (9) is shut off. This cannot be turned on within the demand time limit in which it was shut off.
When the demand time limit ends (the next demand time limit starts), the control outputs, including the manual shut off control output, are turned on in order of the longest shut off time (1→2→8→・・・9). These are turned on at a five-second interval.
At the next demand time limit, the control outputs are turned off in the order of priority number (10→12) following those shut off at the previous time limit. After control No. 12, the newest control output in the order of priority is returned to and shut off (1→2→・・・).



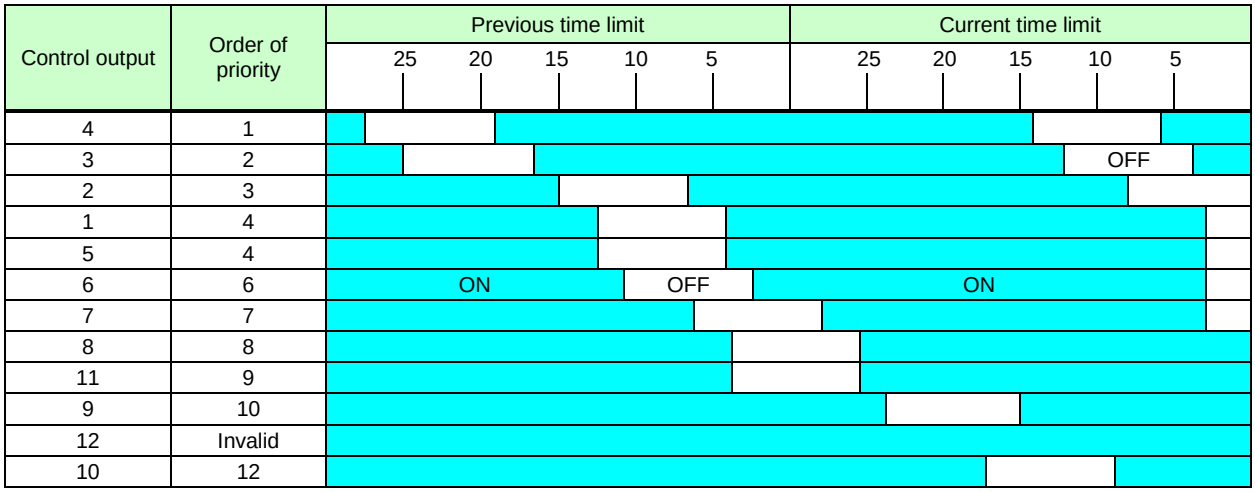
Example of operation during manual control

(c) Cyclic − Reclosing after Reclosing interval control

Each control output is shut off and turned on in order so that only a specific control output is not shut off.
A control output that has been shut off is forcibly turned on again when the off/on time passes.
A control output that has been manually controlled even once is excluded from the demand control target within that time limit.

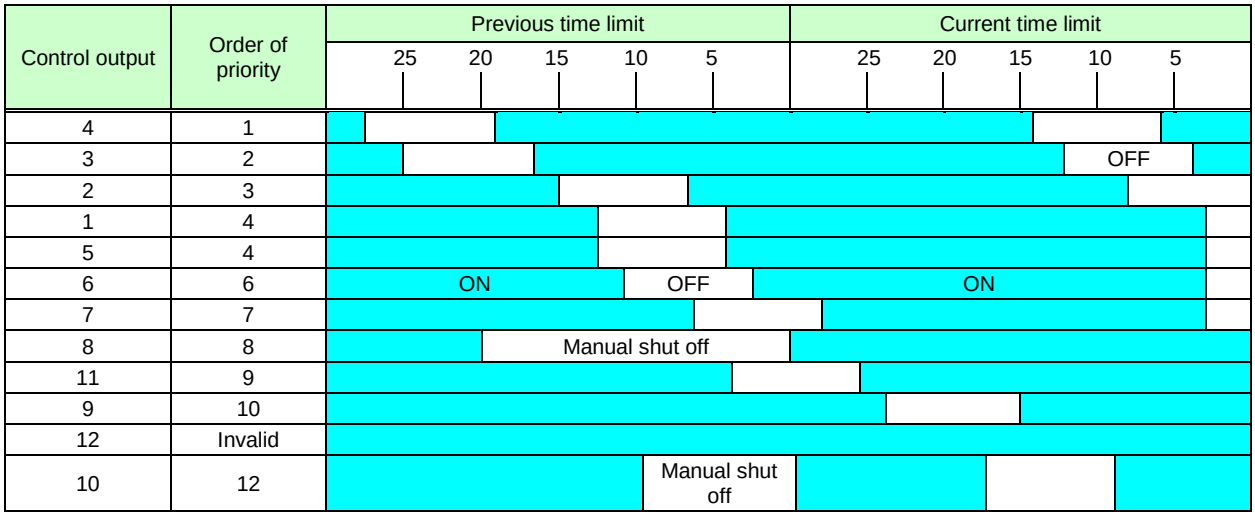
Shut off	Current time limit shut off control (Current demand time limit)	The control numbers are shut off after a set time in the order of priority. (Shut off in the order of 1→2→3→・・・→11→12→1→2・・・) When all control outputs from the oldest order of priority have been shut off, the system returns to the newest order of priority number, and shuts off the control outputs.
	Next time limit shut off control (Next demand time limit)	The next demand time limit is also shut off after a set time following the order of priority numbers. (At the next demand time limit, the shut off starts from the control output in the order of priority following the previous time limit.) * If the next order of priority number is manually controlled at the previous demand time limit, the shut off starts after a set time from the next control output in the order.
	Shut off control when the order of priority number setting is changed	If the priority setting is changed, shut off starts after a set time from the newest order of priority number at the demand time limit following the setting change.
Turned on	Current time limit turn on control (Current demand time limit)	The control number is forcibly turned on again after the shut off time has surpassed the preset off/on time.
	Next time limit turn on control (Next demand time limit)	Even when the next demand time limit starts, the control output shut off from the previous time limit is turned on after a set time from the shut off. However, for the control output that was manually controlled during the past time limit, all control outputs are turned on again when the next demand time limit starts. Control outputs with the same shut off time are shut off in the order of priority. The control output shut off at the next demand time limit is turned on simultaneously as the “current time limit on control”.
	Turn on control when the order of priority number setting is changed	If the order of priority numbers have been changed from 1-12 to invalid, the changed control outputs are all turned on when the demand time limit switches. If the order of priority numbers have been changed (including when changed from 1-12 to invalid), or when the control method has been changed to Turn on after a set time - cyclic control, all control outputs are turned on from the newest order of priority number when the demand time limit switches.

[1] Example of normal operation (Values in parentheses indicate the priority level numbers)
The control outputs are shut off in the order of priority level (1→2→3→・・・→9). Control outputs with the same priority level are shut off simultaneously. The shut off control output is turned on after a set time (off/on time) has passed after shut off. In this example, priority 8 and 9 are shut off the multiple control output simultaneously at emergency control region.
Even if the demand time limit ends (the next demand time limit starts), the control output that are shut off from the previous time limit is turned on after a set time has passed from the shut off.
At the next demand time limit, the control outputs are turned off in the order of priority number (10→12) following those shut off at the previous time limit. After control No. 12, the newest control output in the order of priority is returned to and shut off (1→2→・・・).



Example of operation for off/on after set time - cyclic control

[2] Example of operation during manual control (Values in parentheses indicate the priority numbers)
The control outputs are shut off in the order of the priority (1→2→3→・・・7). The order of priority number 8 control output is manually controlled, and thus is excluded from the demand control target. The next order of priority number (9) is shut off. The shut off control output is turned on after a set time (off/on time) has passed after shut off.
When the next demand time limit ends (the next demand time limit starts), the control outputs manually shut off at the end of the demand time limit are turned on in order of longest shut off time (8→12). These are turned on at a five-second interval.
At the next demand time limit, the control outputs are turned off in the order of priority number (10→12) following those shut off at the previous time limit. After control No. 12, the newest control output in the order of priority is returned to and shut off (1→2→・・・).



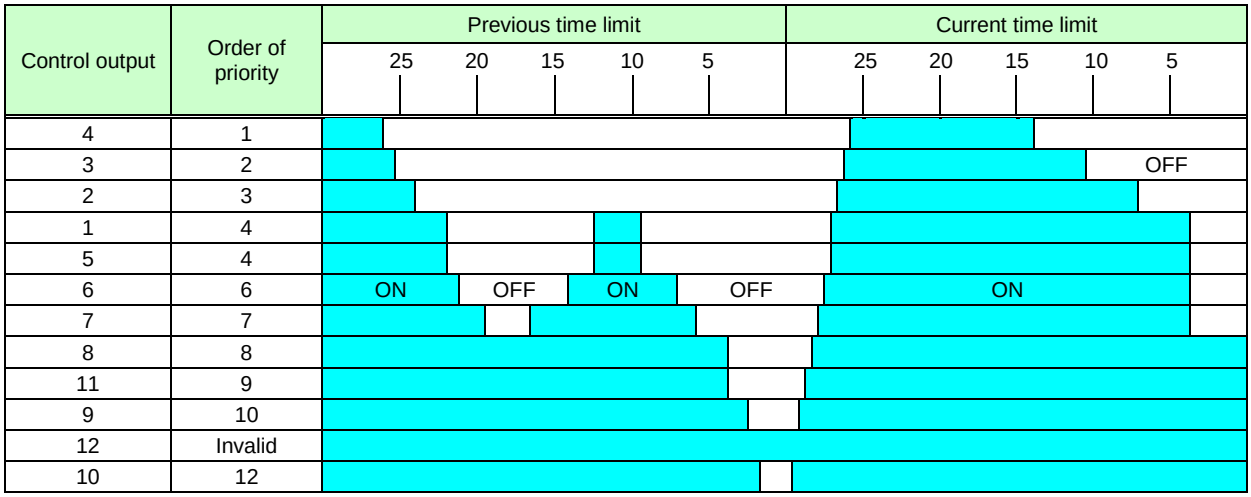
Example of operation during manual control

(d) Priority order - Reclosing control

The control outputs are shut off from the order of highest priority, and are turned on from the control output with the order of lowest priority.
A control No. that has been manually controlled even once is excluded from the demand control target within that time limit.

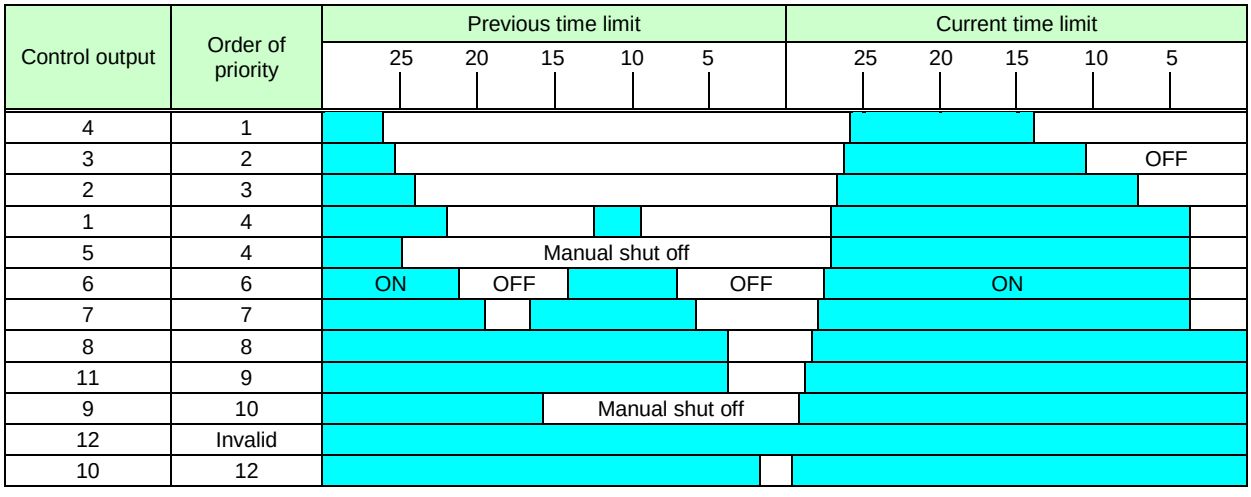
Shut off	Current time limit shut off control (Current demand time limit)	Shut off starts with the control output having the highest order of priority among those that are on.
	Next time limit shut off control (Next demand time limit)	Even at the next demand time limit, shut off starts with the control output having the highest order of priority among those that are on.
	Shut off control when the order of priority number setting is changed	Even when the order of priority has been changed, at the next demand time limit after the changes, shut off starts with the control output having the highest order of priority among those that are on.
Turned on	Current time limit turn on control (Current demand time limit)	Turning on starts with the control output having the lowest order of priority among those that are shut off.
	Next time limit turn on control (Next demand time limit)	When the next demand time limit starts, all control outputs, including the manually controlled control output, are turned on starting with the control output having the lowest order of priority. The control output shut off at the next demand time limit is turned on simultaneously as the “current time limit on control”.
	Turn on control when the order of priority number setting is changed	If the order of priority numbers have been changed from 1-12 to invalid, the changed control outputs are all turned on when the demand time limit switches. If the order of priority has been changed (including 1-12 to invalid), or when the control method has been changed to off/on − order of priority control, all control outputs are turned on from the lowest order of priority number when the demand time limit switches.

[1] Example of normal operation (Values in parentheses indicate the priority level numbers)
The control outputs that are on are turned off in the order of highest priority (1→2→3→・・・→7). With on control, the control outputs that are off are turned on in the order of lowest priority (7→6→4). If the control outputs have the same order of priority, they are shut off simultaneously and turned on simultaneously. In this example, priority 8 and 9 are shut off the multiple control output simultaneously at emergency control region.
When the demand time limit ends (the next demand time limit starts), the control outputs that are shut off at the end of the demand time limit are turned on in the order of lowest priority (12→10→9→8→・・・1). These are turned on at a five-second interval. The control outputs with same order of priority are turned on simultaneously.
At the next demand time limit, the control outputs are shut off in the order of highest priority (1→2→3・・・).



Example of operation for off/on - order of priority control

[2] Example of operation during manual control (Values in parentheses indicate the priority numbers)
The control outputs that are on are turned off in the order of highest priority (1→2→3→4). Control output 5 (order of priority 4) is manually controlled so it is excluded from the demand control target. The next priority (6→7) is shut off. With on control, the control outputs that are shut off are turned on in the order of lowest priority (7→6→4). In this example, priority 8 and 9 are shut off the multiple control output simultaneously at emergency control region.
When the demand time limit ends (the next demand time limit starts), the control outputs, including the manual shut off control output, are turned on in the order of lowest priority (12→10→9→・・・1). These are turned on at a five-second interval.
At the next demand time limit, the control outputs are shut off in the order of highest priority (1→2→3・・・).



Example of operation during manual shut off control

(e) Priority order − Reclosing after Demand time limit control

The control outputs are shut off from the order of highest priority.
A control output that has been shut off cannot be turned on until the demand time limit ends (starts).
A control output that has been manually controlled even once is excluded from the demand control target within that time limit.

Shut off	Current time limit shut off control (Current demand time limit)	Shut off starts with the control output having the highest priority among those that are on.
	Next time limit shut off control (Next demand time limit)	Even at the next demand time limit, shut off starts with the control output having the highest order of priority among those that are on.
	Shut off control when the order of priority number setting is changed	Even when the order of priority has been changed, at the next demand time limit after the changes, shut off starts with the control output having the highest order of priority among those that are on.
Turned on	Current time limit turn on control (Current demand time limit)	Cannot be turned on until the demand time limit ends.
	Next time limit turn on control (Next demand time limit)	When the next demand time limit starts, all control outputs, including the manually controlled control number, are turned on starting with the control output having the lowest order of priority. The control output shut off at the next demand time limit is turned on simultaneously as the “current time limit on control”.
	Turn on control when the order of priority number setting is changed	If the order of priority numbers have been changed from 1-12 to invalid, the changed control outputs are all turned on when the demand time limit switches. If the order of priority has been changed (including 1-12 to invalid), or when the control method has been changed to time limit on - priority control, all control outputs are turned on from the lowest order of priority number when the demand time limit switches.

[1] Example of normal operation (Values in parentheses indicate the priority level numbers)
The control outputs that are on are turned off in the order of highest priority (1→2→3→･･･→7). If the control outputs have the same order of priority, they are shut off simultaneously. These cannot be turned on within the demand time limit that they were shut off. In this example, priority 8 and 9 are shut off the multiple control output simultaneously at emergency control region.
When the demand time limit ends (the next demand time limit starts), the control outputs that are shut off at the end of the demand time limit are turned on in the order of lowest priority (12→10→9→8→･･･1). These are turned on at a five-second interval. The control outputs with same order of priority are turned on simultaneously.
At the next demand time limit, the control outputs are shut off in the order of highest priority (1→2→3･･･).

Control output	Order of priority	Previous time limit	Current time limit
		25 20 15 10 5	25 20 15 10 5
4	1		
3	2		OFF
2	3		
1	4		
5	4		
6	6	ON OFF	ON
7	7		
8	8		
11	9		
9	10		
12	Invalid		
10	12		

Example of operation for time limit on - order of priority control

[2] Example of operation during manual control (Values in parentheses indicate the priority numbers)
The control outputs that are on are turned off in the order of highest priority (1→2→3→4). Control output 5 (order of priority 4) is manually controlled so it is excluded from the demand control target. The next priority (6→7→8→9→12) is shut off. These cannot be turned on within the demand time limit that they were shut off. In this example, the order of priority 8 and 9 are simultaneously shut off with the multiple control output simultaneous shut off.
When the demand time limit ends (the next demand time limit starts), the control outputs, including the manual shut off control output, are turned on in the order of lowest priority (12→10→9→･･･→1). These are turned on at a five-second interval.
At the next demand time limit, the control outputs are shut off in the order of highest priority (1→2→3･･･).

Control output	Order of priority	Previous time limit	Current time limit
		25 20 15 10 5	25 20 15 10 5
4	1		
3	2		OFF
2	3		
1	4		
5	4	Manual shut off	
6	6	ON OFF	ON
7	7		
8	8		
11	9		
9	10	Manual shut off	
12	Invalid		
10	12		

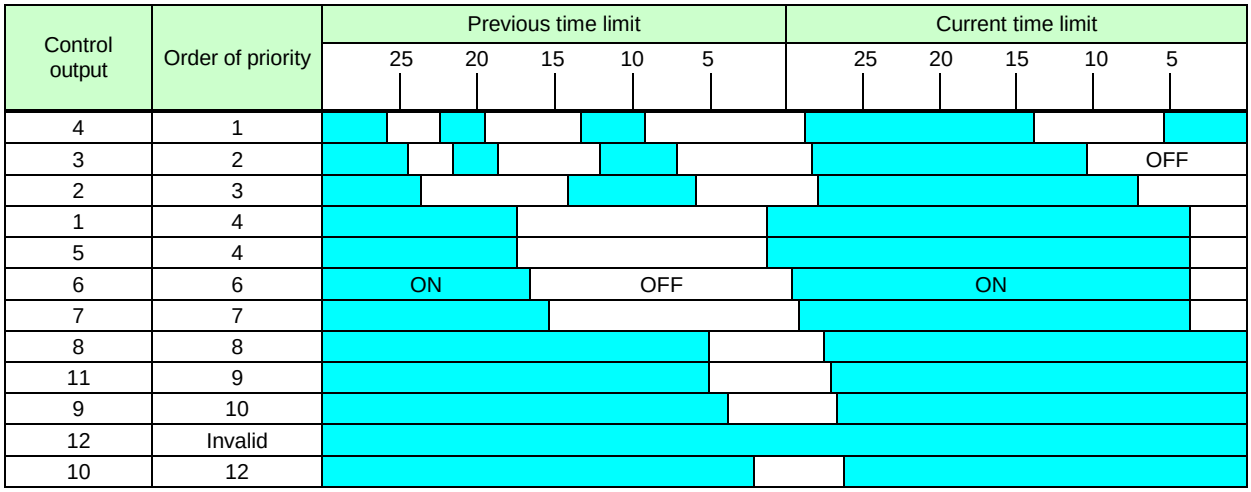
Example of operation during manual control

(f) Priority cyclic - Reclosing control

The control outputs are shut off from the order of highest priority, and are turned on again from the control output with the longest shut off time.
A control output that has been manually controlled even once is excluded from the demand control target within that time limit.

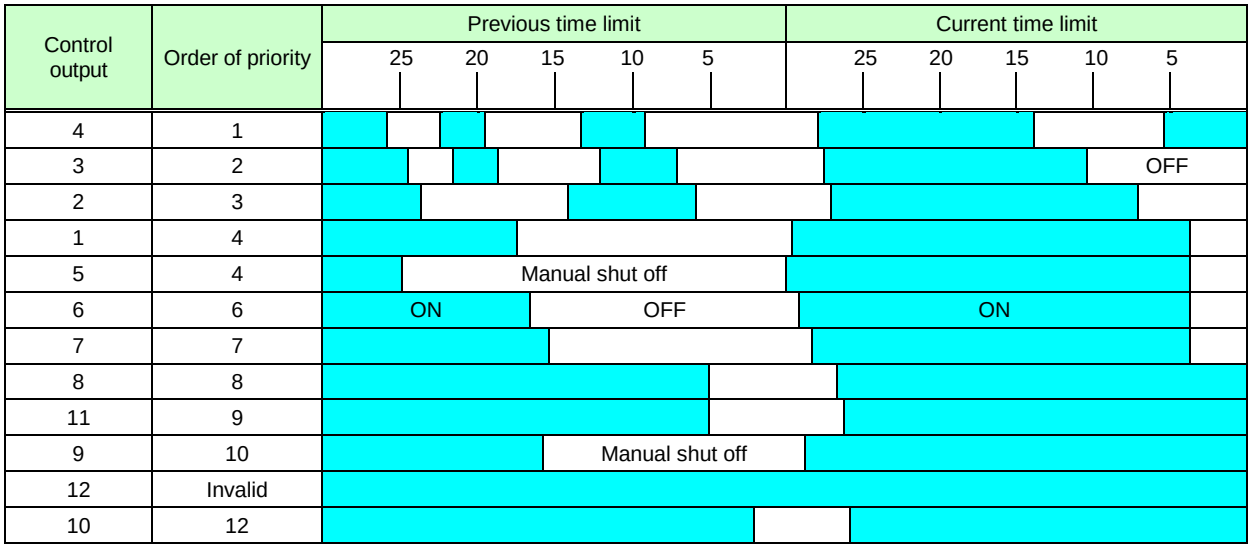
Shut off	Current time limit shut off control (Current demand time limit)	Shut off starts with the control output having the highest priority among those that are on.
	Next time limit shut off control (Next demand time limit)	Even at the next demand time limit, shut off starts with the control output having the highest order of priority among those that are on.
	Shut off control when the order of priority number setting is changed	Even when the order of priority has been changed, at the next demand time limit after the changes, shut off starts with the control output having the highest order of priority among those that are on.
Turned on	Current time limit turn on control (Current demand time limit)	The control outputs that are shut off are turned on in order from the one with the longest shut off time. Control outputs with the same shut off time are turned on from the one with the highest order of priority.
	Next time limit turn on control (Next demand time limit)	When the next demand time limit starts, the control outputs, including the manually controlled control number, are turned on in order of longest shut off time. Control outputs with the same shut off time are turned on from the one with the highest order of priority. The control output shut off at the next demand time limit is turned on simultaneously as the “current time limit on control”.
	Turn on control when the order of priority number setting is changed	If the order of priority numbers have been changed from 1-12 to invalid, the changed control outputs are all turned on when the demand time limit switches. If the order of priority has been changed (including 1-12 to invalid), or when the control method has been changed to off/on - priority cyclic control, all control outputs are turned on from the highest order of priority number when the demand time limit switches.

[1] Example of normal operation (Values in parentheses indicate the priority level numbers)
The control outputs that are on are shut off in the order of highest priority (1→2→3), and are turned on in the order of longest shut off time (1→2). Then, the control outputs that are on are shut off in the order of highest priority (1→2→4→6→7), and are turned on in the order of longest shut off (3→1→2). In this example, priority 8 and 9 are shut off the multiple control output simultaneously at emergency control region.
When the demand time limit ends (the next demand time limit starts), the control outputs shut off at the end of the demand time limit are turned on in order of longest shut off time (6→7→1→2→3→8→9→10→12). These are turned on at a five-second interval. The control outputs with the same shut off time are turned on in the order of highest priority (8→9). The control outputs with same order of priority are turned on simultaneously.
At the next demand time limit, the control outputs are shut off in the order of highest priority (1→2→3･･･).



Example of operation for Off/on - priority cyclic control

[2] Example of operation during manual control (Values in parentheses indicate the priority numbers)
The control outputs that are on are shut off in the order of highest priority (1→2→3) and are turned on in the order of longest shut off time (1→2). Then, the control outputs that are on are shut off in the order of highest priority (1→2→4). Control No. 5 (order of priority 4) is manually controlled so it is excluded from the demand control target. The next priority (6→7) is shut off. In this example, priority 8 and 9 are shut off the multiple control output simultaneously at emergency control region.
When the demand time limit ends (the next demand time limit starts), the control outputs, including the manually shut off control output, are turned on in the order of longest shut off time (4→4→6→･･･→12). These are turned on at a five-second interval. The control outputs with same order of priority are turned on simultaneously.
At the next demand time limit, the control numbers are shut off in the order of highest priority (1→2→3･･･).



Example of operation for manual shut off control

4.3.4. Seasonal Time Zone Control Function

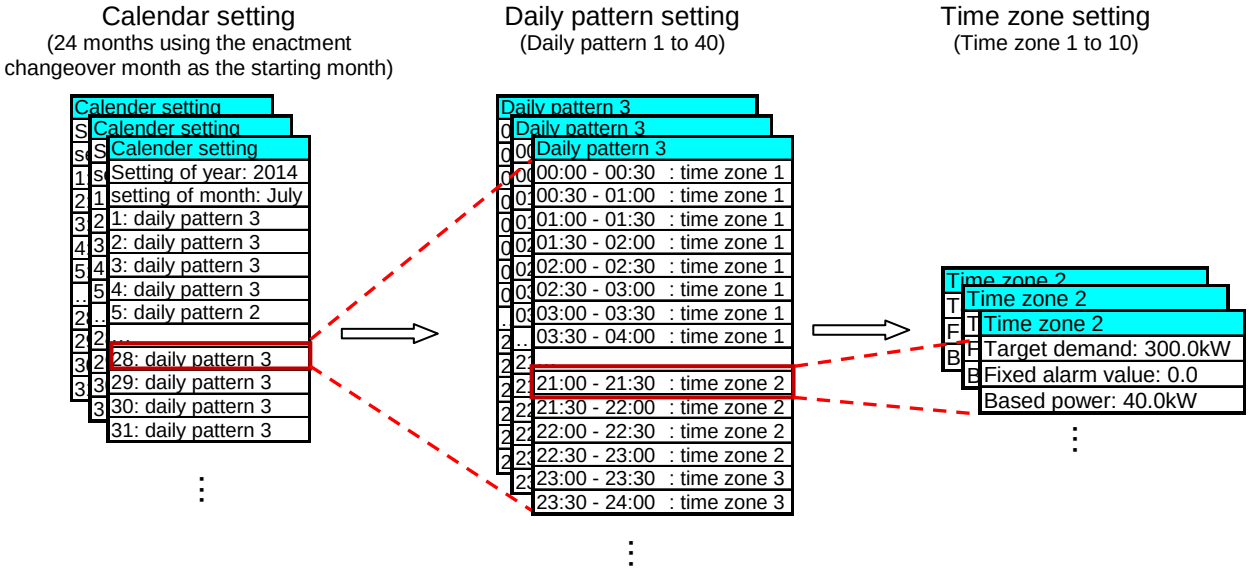
Time Zone Schedule Function

The current time zone 1 to time zone 10 is judged from the current date and time, and the system is run with the settings (target demand, fixed alarm value, base power) for the corresponding time zone.
By setting the time zone setting, daily pattern setting and calendar setting beforehand, demand control that matches the seasons or date/time can be carried out.

<Example>

Time zone schedule for July 28, 2014, 21:00 to 21:30 (30-minute demand time limit)
In the following diagram, daily pattern 3 is set for the July 28, 2014 in the calendar settings. Thus, the system runs with pattern 3 on July 28, 2014.
21:00 to 21:30 is set to time zone 2 in the daily pattern, so the time zone 2 settings (target demand 300.0 kW, fixed alarm value 0.0 kW, base power 40.0 kW) are used during 21:00 to 21:30 on July 28, 2014.

<Image>


Calendar setting
(24 months using the enactment changeover month as the starting month)
Daily pattern setting
(Daily pattern 1 to 40)
Time zone setting
(Time zone 1 to 10)
Calender setting
Setting of year: 2014
setting of month: July
1: daily pattern 3
2: daily pattern 3
3: daily pattern 3
4: daily pattern 3
5: daily pattern 2
28: daily pattern 3
29: daily pattern 3
30: daily pattern 3
31: daily pattern 3
Daily pattern 3
00:00 - 00:30 : time zone 1
00:30 - 01:00 : time zone 1
01:00 - 01:30 : time zone 1
01:30 - 02:00 : time zone 1
02:00 - 02:30 : time zone 1
02:30 - 03:00 : time zone 1
03:00 - 03:30 : time zone 1
03:30 - 04:00 : time zone 1
21:00 - 21:30 : time zone 2
21:30 - 22:00 : time zone 2
22:00 - 22:30 : time zone 2
22:30 - 23:00 : time zone 2
23:00 - 23:30 : time zone 3
23:30 - 24:00 : time zone 3
Time zone 2
Target demand: 300.0kW
Fixed alarm value: 0.0
Based power: 40.0kW

***** Refer to "4.4.2 Demand alarm and control setting", and "4.4.3 "Demand calendar setting" for details on setting.

Remarks

- When not using the seasonal time zone control, one value can be set each for target demand, fixed alarm value and base power. The demand control control is carried out based on those setting values.

Configure the demand control setting

This section describes how to set for demand monitor and control.

4.3.5. Normal demand setting (setting of the instrument information)

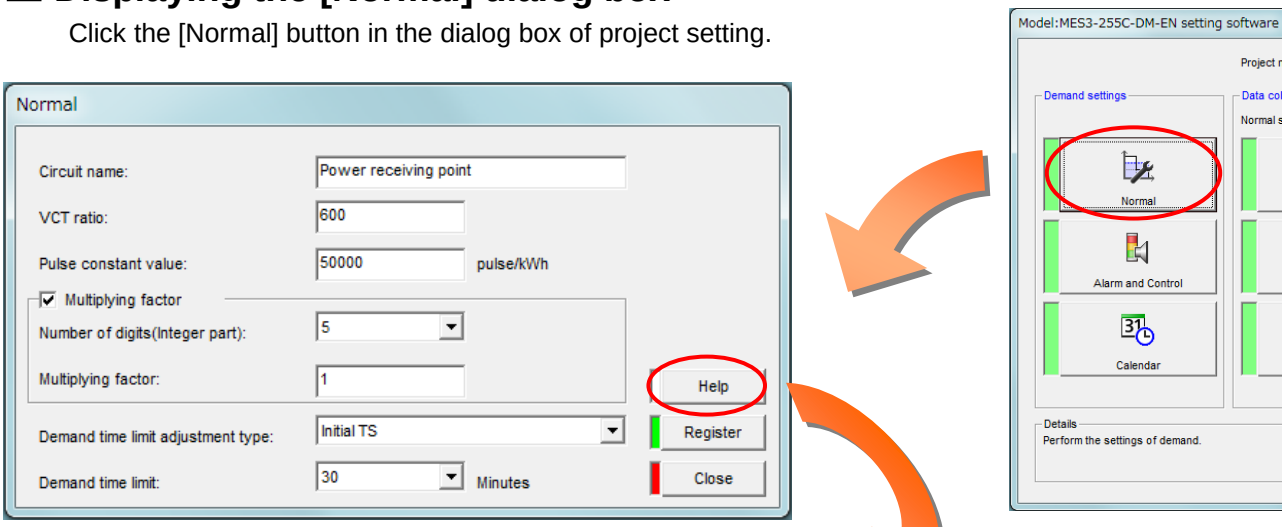
This section describes the setting procedures for demand monitor and control.
Always read “4.3 Demand control and Control Section Specifications” thoroughly before setting, and set the function correctly.

Registering normal demand information

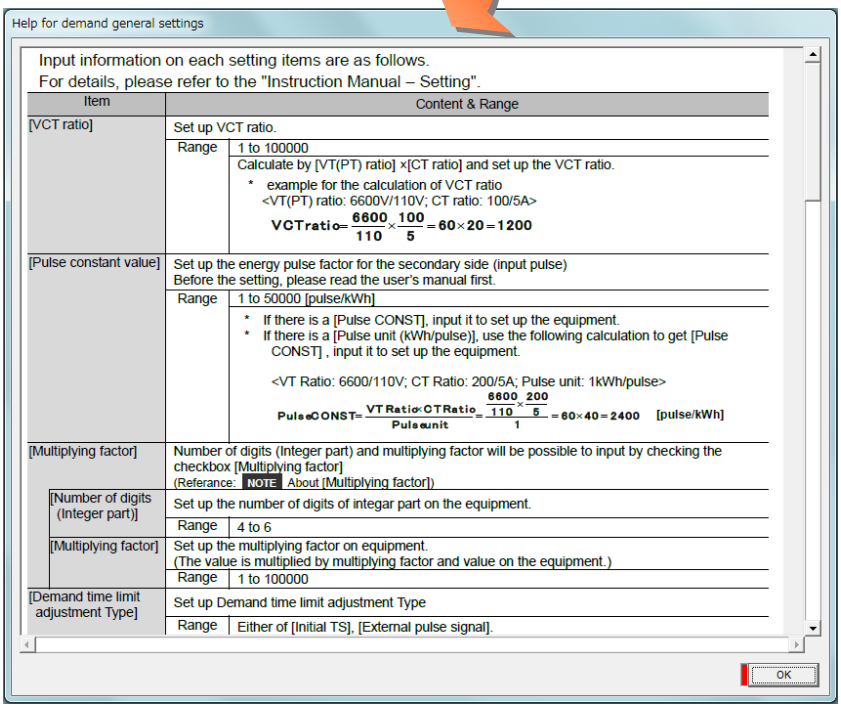
The following describes how to set normal demand information.

1 Displaying the [Normal] dialog box

Click the [Normal] button in the dialog box of project setting.



In the initial state, it displays the default value of each item.


Help for demand general settings
Input information on each setting items are as follows.
For details, please refer to the "Instruction Manual – Setting".
Item
Content & Range
[VCT ratio]
Set up VCT ratio.
Range
1 to 100000
Calculate by [VT(PT) ratio] x[CT ratio] and set up the VCT ratio.
* example for the calculation of VCT ratio
<VT(PT) ratio: 6600V/110V; CT ratio: 100/5A>
VCTratio=6600/110×100/5=60×20=1200
[Pulse constant value]
Set up the energy pulse factor for the secondary side (input pulse)
Before the setting, please read the user's manual first.
Range
1 to 50000 [pulse/kWh]
* If there is a [Pulse CONST], input it to set up the equipment.
* If there is a [Pulse unit (kWh/pulse)], use the following calculation to get [Pulse CONST] , input it to set up the equipment.
<VT Ratio: 6600/110V; CT Ratio: 200/5A; Pulse unit: 1kWh/pulse>
PulseCONST=VT Ratio×CT Ratio/Pulse unit=6600/110×200/5/1=60×40=2400 [pulse/kWh]
[Multiplying factor]
Number of digits (Integer part) and multiplying factor will be possible to input by checking the checkbox [Multiplying factor]
(Referance: NOTE About [Multiplying factor])
[Number of digits (Integer part)]
Set up the number of digits of integar part on the equipment.
Range
4 to 6
[Multiplying factor]
Set up the multiplying factor on equipment.
(The value is multiplied by multiplying factor and value on the equipment.)
Range
1 to 100000
[Demand time limit adjustment Type]
Set up Demand time limit adjustment Type
Range
Either of [Initial TS], [External pulse signal].
OK

Remarks

・When clicking the [help] button, [Help for demand general settings] dialog box is displayed.

2 Entering the meter information

Inputting the each setting value.

Item	Content & Range	
[VCT ratio]	Set up VCT ratio.	
	Range	1 to 100000
	Calculate by [VT(PT) ratio] ×[CT ratio] and set up the VCT ratio. * example for the calculation of VCT ratio <VT(PT) ratio: 6600V/110V; CT ratio: 100/5A> $VCTratio = \frac{6600}{110} \times \frac{100}{5} = 60 \times 20 = 1200$	
[Pulse constant value]	Set up the energy pulse factor for the secondary side (input pulse) Before the setting, please read the user's manual first.	
	Range	1 to 50000 [pulse/kWh]
	* If there is a [Pulse CONST], input it to set up the equipment. * If there is a [Pulse unit (kWh/pulse)], use the following calculation to get [Pulse CONST] , input it to set up the equipment. <VT Ratio: 6600/110V; CT Ratio: 200/5A; Pulse unit: 1kWh/pulse> $PulseCONST = \frac{VTRatio \times CTRatio}{Pulseunit} = \frac{\frac{6600}{110} \times \frac{200}{5}}{1} = 60 \times 40 = 2400$ [pulse/kWh]	
[Multiplying factor]	Number of digits (Integer part) and multiplying factor will be possible to input by checking the checkbox [Multiplying factor] (Referance: NOTE About [Multiplying factor])	
[Number of digits (Integer part)]	Set up the number of digits of integar part on the equipment.	
	Range	4 to 6
[Multiplying factor]	Set up the multiplying factor on equipment. (The value is multiplied by multiplying factor and value on the equipment.)	
	Range	1 to 100000
[Demand time limit adjustment Type]	Set up Demand time limit adjustment Type	
	Range	Either of [Initial TS], [External pulse signal].
[Demand time limit]	Set up Demand time limit.	
	Range	One of [15 min], [30 min], [1 hour] * Only [30 min] is possible in [External pulse signal] of [Demand time limit adjustment Type]

NOTE

About [Multiplying factor]

For setting up for [Number of digits (Integer part)] and [Multiplying factor]), the equipment value will be the same Integrated value of Consumption as the meter.
And it works as an amount of power meter.

If it is not matter to match the range of Integrated value of Consumption, then Demand monitoring will be able to set up by only [VCT ratio] and [Pulse constant value]
(Without [Multiplying factor] settings)

<Example of a case in which electronic multi-measuring instrument ME110SSR-C is used.>

The following is an excerpt of "ME110SSR user's manual: detailed edition".

Calculate and set the [VCT ratio, pulse constant value, number of digit, multiplying factor] by the following procedure.

Set the pulse value of pulse output 1.

Pulse value is selected from the table below, according to total load [kW].

$$\text{Total load [kW]} = \frac{\alpha \times (\text{VT Primary Voltage}) \times (\text{CT Primary Current})}{1000}$$

α:		
	1	1-phase 2-wire
	2	1-phase 3-wire
	$\sqrt{3}$	3-phase 3-wire
	3	3-phase 4-wire

*1: For 1-phase 3-wire setting, the VT primary voltage is calculated using 110V.
*2: For direct voltage setting, the direct voltage is used for calculation instead of the VT primary voltage.
*3: For 3-phase 4-wire setting, the VT primary voltage is calculated using the phase to neutral voltage.

Total load [kW]	Display format		Possible pulse unit settings [kWh/pulse]			
	Digital display	Multiplier				
Less than 10	8888.88	× 1	1	0.1	0.01	0.001
10 or higher but less than 100	88888.8	× 1	10	1	0.1	0.01
100 or higher but less than 1000	88888.8	× 10	100	10	1	0.1
1000 or higher but less than 10000	88888.8	× 100	1000	100	10	1
10000 or higher but less than 100000	88888.8	× 1000	10000	1000	100	10
100000 or higher	88888.8	× 10000	100000	10000	1000	100

Note 1: When ⑦Pulse output 1 output item is set to "non," this setting will be skipped.
Note 2: The factory default setting values are minimum values for the pulse unit that can be set.
Note 3: For reactive power, kW in the above table needs to be read as kvar, and kWh needs to be read as kvarh.

■VCT ratio

<VT(PT) ratio: 6600V/110V; CT ratio: 100/5A>

$$VCTratio = \frac{6600}{110} \times \frac{100}{5} = 60 \times 15 = 900$$

■Pulse constant value

<Pulse unit: 1kWh/pulse>

$$PulseCONST = \frac{VTRatio \times CTRatio}{Pulseunit} = \frac{\frac{6600}{110} \times \frac{75}{5}}{1} = 60 \times 15 = 900 \quad [\text{pulse/kWh}]$$

■Number of digits (Integer part), Multiplying factor

Calculate the total load by the equation described in the instruction manual of ME110SSR.

VT primary voltage: 6600, CT primary current: 75, Phase wire system: 3-phase 4-wire

$$Totalloadpower = \frac{6600 \times 75 \times 3}{1000} = 1485$$

Set the following from the display format of the table above.

Number of digits = 5 (Integer part)

Multiplying factor = 100

3 Registering

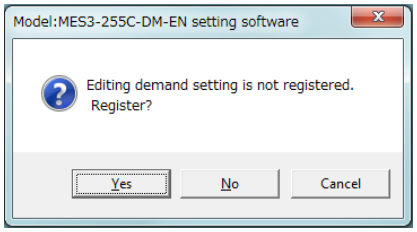
Click the button on the [Normal] dialog box and register.

[Register] button: Register normal demand information you set.

[Close] button: Back to the [Project setting] dialog box.

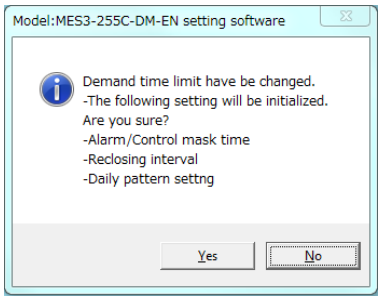
After changing the contents of the normal demand information, click the [Close] button instead of clicking the [Register] button, the message shown on the right is displayed.

[Yes] button : To register
[No] button : Not to register
[Cancel] button : Back to the [Normal] dialog box



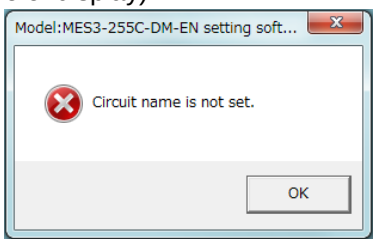
When the contents of [demand time limit] setting has been changed, the message shown on the right is displayed.

[Yes] button : To register
[No] button : Not to register



(Example of display)

If the setting is incorrect, the error message such as the one on the right will appear according to the invalid setting when the [Register] button is clicked.
Correct the setting to satisfy the conditions.



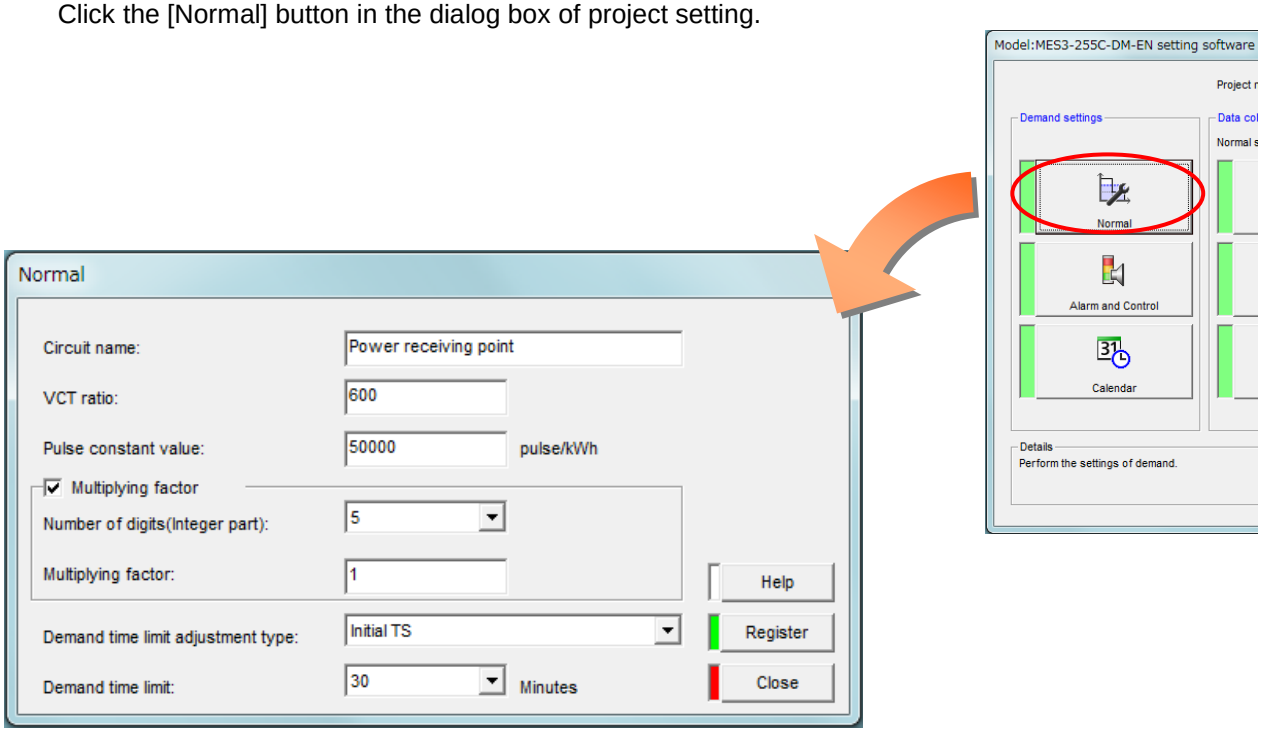
***1 Confirmed the setting and when writing to EcoWebServerIII, save and write of the project.**
***2 Setting is enabled after the start (the end) of the next demand time limit (when the remaining time reaches 30:00 (time limit = 30 min)). Until then, work with the previous setting.**
(The electric energy calculation is immediately reflected.)
***3 Writing the project by 5 minutes before the start (the end) of the demand time limit.**

Editing the registered normal demand information

This section described how to edit the registered normal demand information.

1 Displaying the [Normal] dialog box

Click the [Normal] button in the dialog box of project setting.



2 Select an item you want to edit, and click the [Edit] button.

Click the [Register] button after editing items you want to change.
* The entries and conditions for each item are similar to those resistering a new terminal.

***1 Confirmed the setting and when writing to EcoWebServerIII, save and write of the project.**
***2 Setting is enabled after the start (the end) of the next demand time limit (when the remaining time reaches 30:00 (time limit = 30 min)). Until then, work with the previous setting.**
(The electric energy calculation is immediately reflected.)
***3 Writing the project by 5 minutes before the start (the end) of the demand time limit.**

4.3.6. Demand alarm and control setting

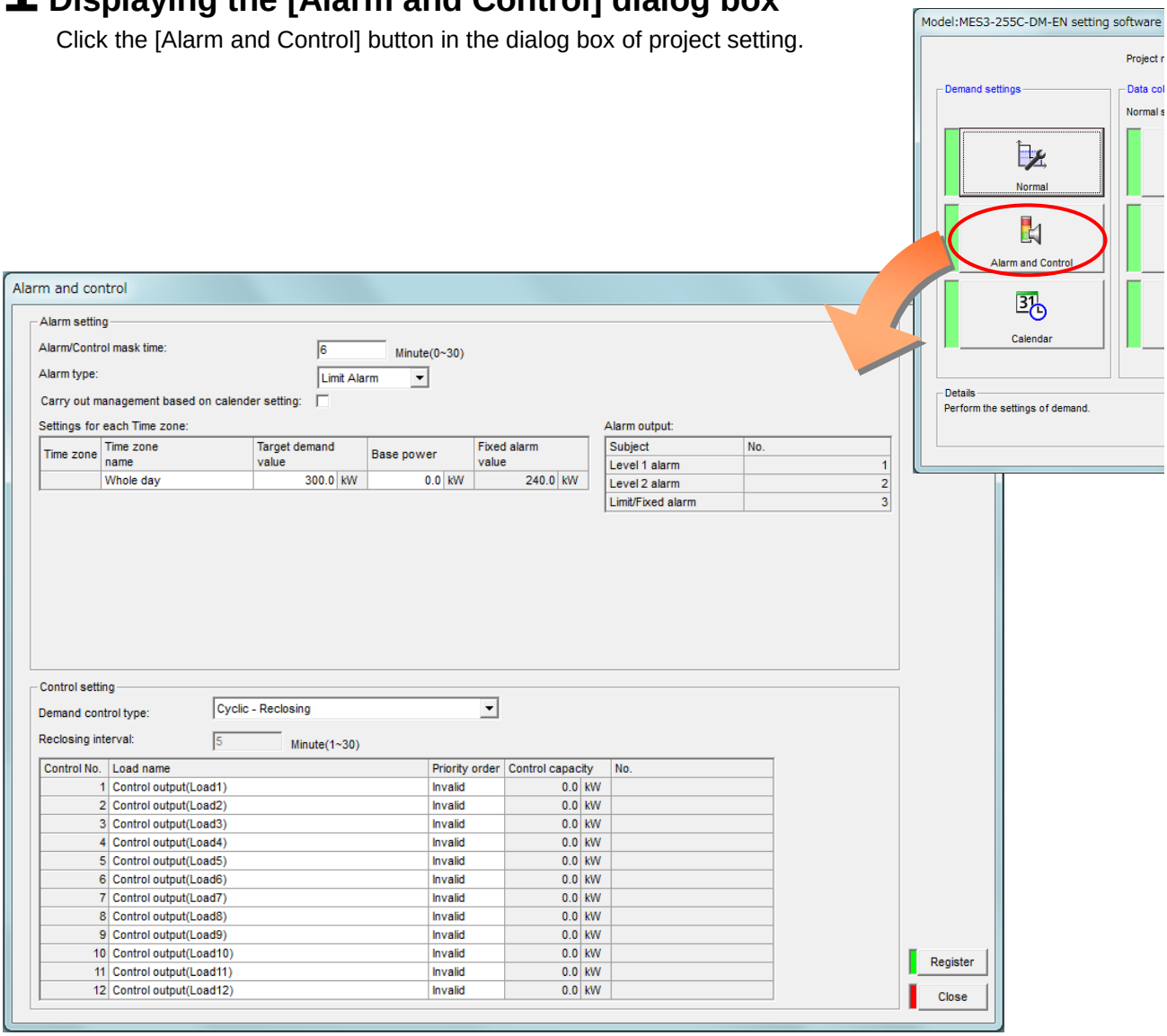
This section describes the setting procedures for demand monitor and control.
Always read “4.3 Demand control and Control Section Specifications” thoroughly before setting, and set the function correctly.

Registering demand alarm and control

The following describes how to set demand alarm and control.

1 Displaying the [Alarm and Control] dialog box

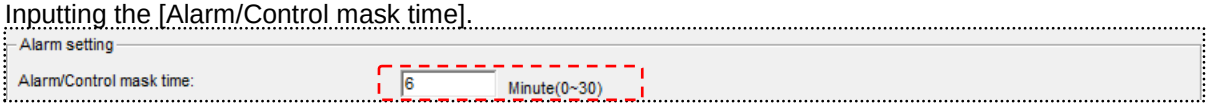
Click the [Alarm and Control] button in the dialog box of project setting.



2 Setting demand alarm and control

Input or select the following items.

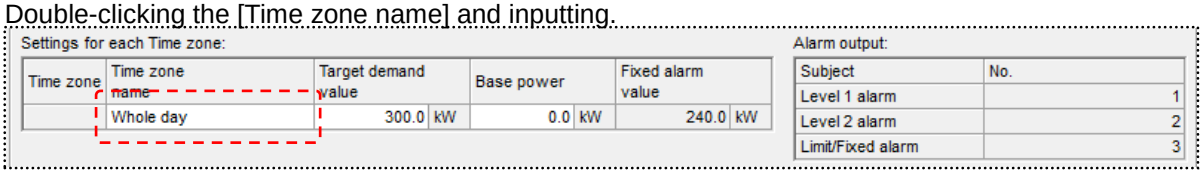
(1) Inputting the [Alarm/Control mask time].



*1 It does not alarm monitoring and demand control until the alarm/control mask time have passed from the start of the demand time limit.
*2 The following can be input.
Demand time limit = 15 min -> 0 - 15 (min)
Demand time limit = 30 min -> 0 - 30 (min)
Demand time limit = 60 min -> 0 - 60 (min)
The default value is 6 minutes.
*3 If set to 30, the alarm monitoring and demand control can be carried out regardless of the remaining time.
（During the reclosing after demand time limit, demand control(off) is not carried out.）
Set the optimal value to match the actual alarm and control situation.

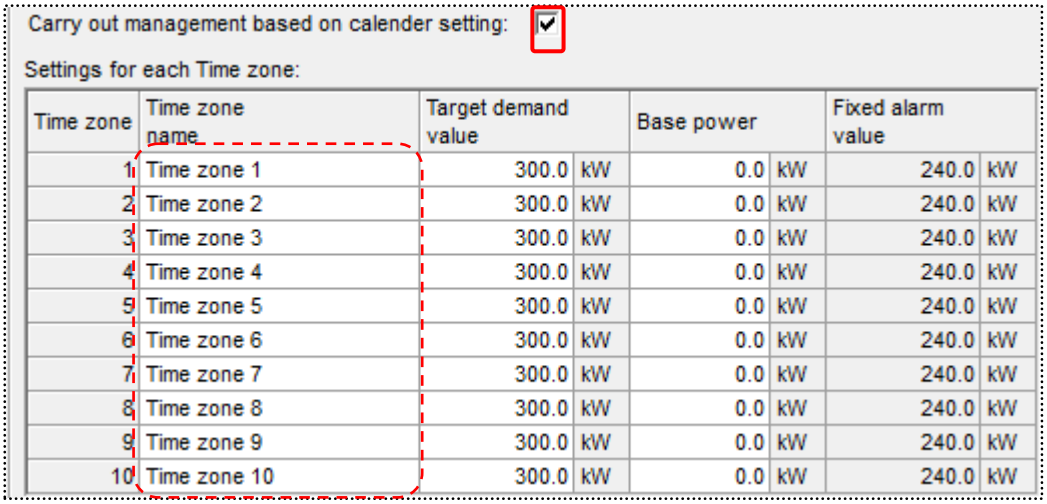
(2) Selecting the [Alarm type].

(3) Double-clicking the [Time zone name] and inputting.



*1 Time zone name can be input up to 16 characters.
*2 The following characters cannot be registered:
< > , “ ¥

(4) When carrying out the season and time zone management, checking the [Carry out management based on calendar setting] check box.
As necessary, inputting the [time zone name] of the time zone 1-10.


Carry out management based on calender setting: ☑

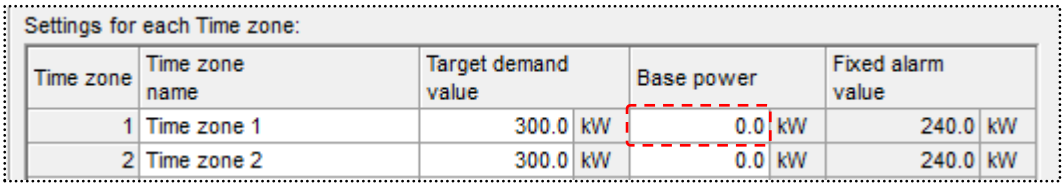
Settings for each Time zone:

Time zone	Time zone name	Target demand value		Base power		Fixed alarm value	
1	Time zone 1	300.0	kW	0.0	kW	240.0	kW
2	Time zone 2	300.0	kW	0.0	kW	240.0	kW
3	Time zone 3	300.0	kW	0.0	kW	240.0	kW
4	Time zone 4	300.0	kW	0.0	kW	240.0	kW
5	Time zone 5	300.0	kW	0.0	kW	240.0	kW
6	Time zone 6	300.0	kW	0.0	kW	240.0	kW
7	Time zone 7	300.0	kW	0.0	kW	240.0	kW
8	Time zone 8	300.0	kW	0.0	kW	240.0	kW
9	Time zone 9	300.0	kW	0.0	kW	240.0	kW
10	Time zone 10	300.0	kW	0.0	kW	240.0	kW

*1 Time zone name can be input up to 16 characters.
The default is [Time zone *] (*=1 - 10).
*2 The following characters cannot be registered:
< > , “ ¥

When selected the [Limit Alarm] in [Alarm Type]

(5) Inputting the [Base power].

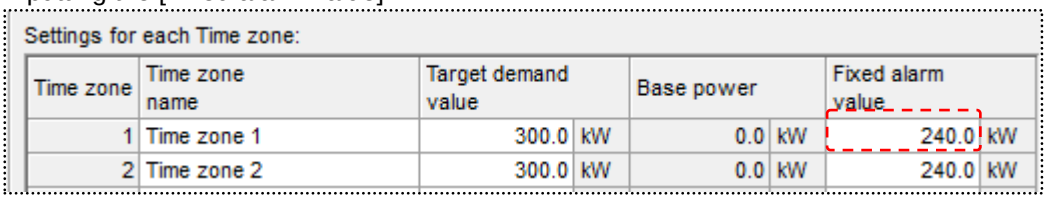

Settings for each Time zone:

Time zone	Time zone name	Target demand value		Base power		Fixed alarm value	
1	Time zone 1	300.0	kW	0.0	kW	240.0	kW
2	Time zone 2	300.0	kW	0.0	kW	240.0	kW

*1 Based power is the power of the load that can not be off.
*2 Control the output/non-output of the limit alarm by the limit power, which is determined from the base power and target demand.
*3 0.0 - 99999.9 can be input.
If set to 0.0 it does not control the output / non-output of limit alarm.
*4 When integers or more than 2 decimal places is input, will be displayed with the first decimal place. (Example: 123.45 -> 123.4, 456 -> 456.0)
*5 When the limit alarm selected to the alarm type, the setting of fixed alarm value can not be changed. In addition, it is not used even if has been set.

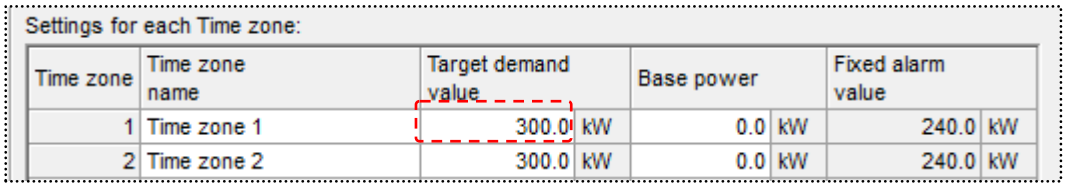
When selected the [Fixed Alarm] in [Alarm Type]

(6) Inputting the [Fixed alarm value].


Settings for each Time zone:
Time zone
Time zone name
Target demand value
Base power
Fixed alarm value
1 Time zone 1 300.0 kW 0.0 kW 240.0 kW
2 Time zone 2 300.0 kW 0.0 kW 240.0 kW

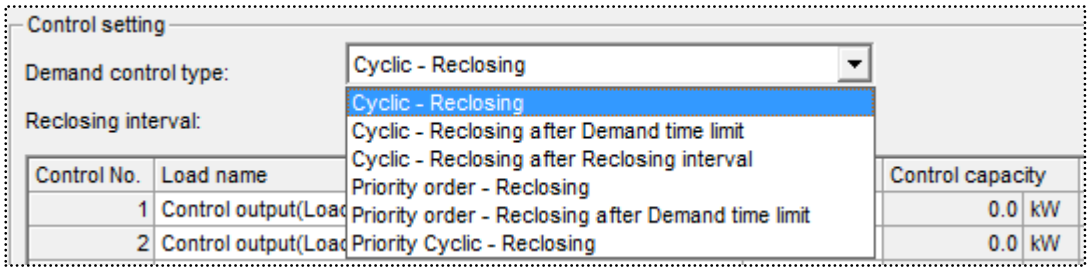
*1 Monitoring the fixed alarm.
*2 0.0 - 99999.9 can be input.
If set to 0.0 it does not monitor the fixed alarm.
*3 When integers or more than 2 decimal places is input, will be displayed with the first decimal place. (Example: 123.45 -> 123.4, 456 -> 456.0)
*4 When the fixed alarm selected to the alarm type, the setting of base power can not be changed. In addition, it is not used even if has been set.

(7) Inputting the [Target demand value].


Settings for each Time zone:
Time zone
Time zone name
Target demand value
Base power
Fixed alarm value
1 Time zone 1 300.0 kW 0.0 kW 240.0 kW
2 Time zone 2 300.0 kW 0.0 kW 240.0 kW

*1 0.0 - 99999.9 can be input.
*2 When integers or more than 2 decimal places is input, will be displayed with the first decimal place. (Example: 123.45 -> 123.4, 456 -> 456.0)

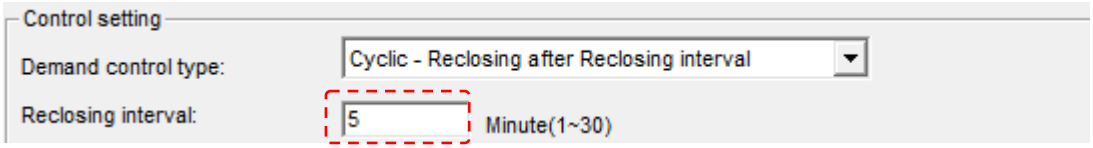
(8) Selecting the [Demand control type].



*1 The details of demand control type, refer to "4.3.3 Demand Control Function".

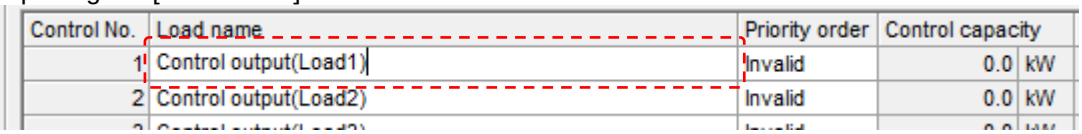
When selected the [Cyclic – Reclosing after Reclosing interval] in [Demand control Type]

(9) Inputting the [Reclosing interval].



*1 The following can be input.
Demand time limit = 15 min -> 0 - 15 (min)
Demand time limit = 30 min -> 0 - 30 (min)
Demand time limit = 60 min -> 0 - 60 (min)
The default value is 5 minutes.
*2 Regardless of the load condition, control output will be turned on after a lapse of the reclosing time(has been set).
*3 When selected the other than [Cyclic – Reclosing after Reclosing interval] to the alarm type, the setting of reclosing interval can not be changed. In addition, it is not used even if has been set.

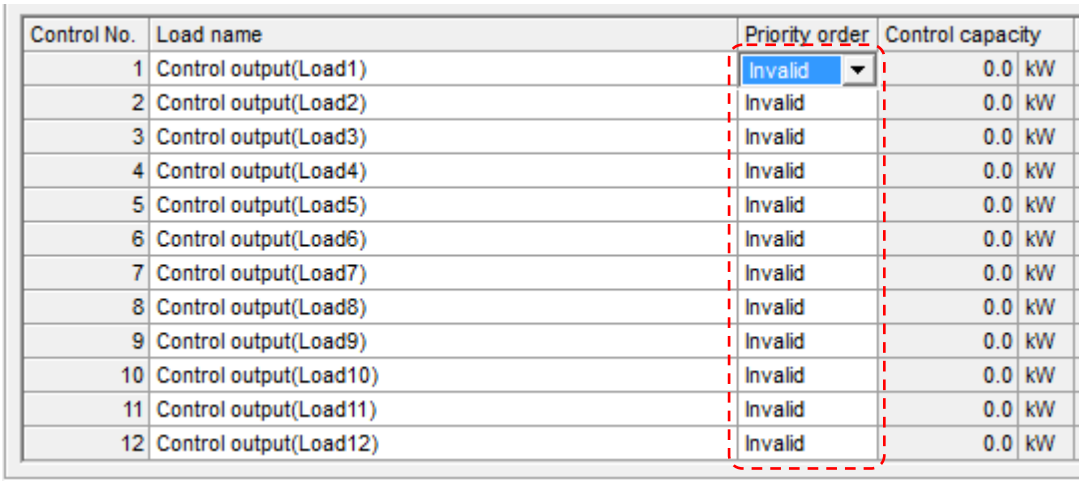
(10) Inputting the [Load name].



Control No.	Load name	Priority order	Control capacity	
1	Control output(Load1)	Invalid	0.0	kW
2	Control output(Load2)	Invalid	0.0	kW

*1 Load name can be input up to 32 characters.
*2 The following characters cannot be registered:
< > , " ¥

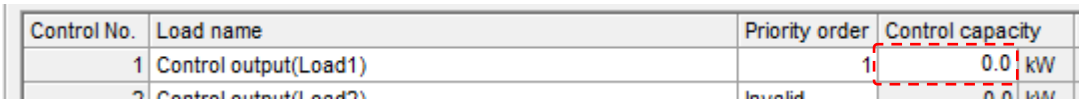
(11) Setting the [Priority order].



Control No.	Load name	Priority order	Control capacity	
1	Control output(Load1)	Invalid	0.0	kW
2	Control output(Load2)	Invalid	0.0	kW
3	Control output(Load3)	Invalid	0.0	kW
4	Control output(Load4)	Invalid	0.0	kW
5	Control output(Load5)	Invalid	0.0	kW
6	Control output(Load6)	Invalid	0.0	kW
7	Control output(Load7)	Invalid	0.0	kW
8	Control output(Load8)	Invalid	0.0	kW
9	Control output(Load9)	Invalid	0.0	kW
10	Control output(Load10)	Invalid	0.0	kW
11	Control output(Load11)	Invalid	0.0	kW
12	Control output(Load12)	Invalid	0.0	kW

*1 Invalid or 1 - 12 can be selected.
*2 Control circuit that is set to [Invalid], does not demand control.
*3 Control circuit that is set to [Invalid], can be ON/OFF manually.
*4 Control circuit that is set to [1 - 12], can be ON/OFF manually.

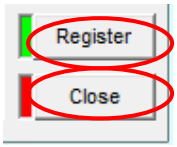
(12) When the [Priority order] is 1 – 12, inputting the [Control capacity].



*1 0.0 - 99999.9 can be input.
*2 When integers or more than 2 decimal places is input, will be displayed with the first decimal place. (Example: 123.45 -> 123.4, 456 -> 456.0)
*3 Set according to the load condition.

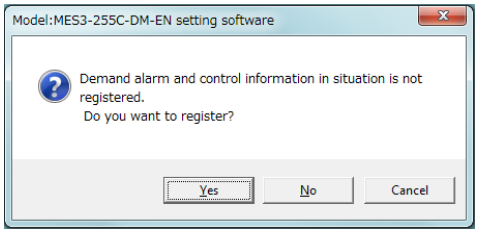
3 Registering

Click the button on the [Alarm and control] dialog box to register.



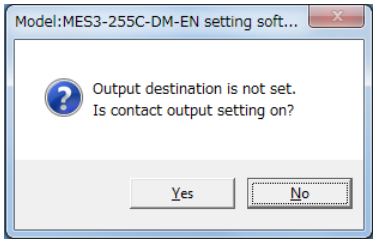
[Register] button : Register the demand alarm and control information you set.
[Close] button : Back to the [Project setting] dialog box.

If you click [Close] button without clicking the [Register] button after changing the demand alarm and control Information, the message shown on the right will be displayed.



[Yes] button : Register
[No] button : Do not register
[Cancel] button : Back to the [Alarm and control] dialog box

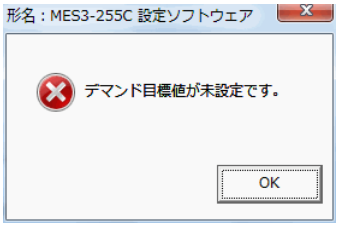
When clicking the [Close] button and if the output destination of the control output is not set, the message shown on the right will be displayed.



(Example of display)

[Yes] button : Register the editing content and display the [Contact output] dialog box.
[No] button : Register the editing content and back to the [Project setting] dialog box.

If the setting is incorrect, the error message such as the one on the right will appear according to the invalid setting when the [Register] button is clicked.
Correct the setting to satisfy the conditions.



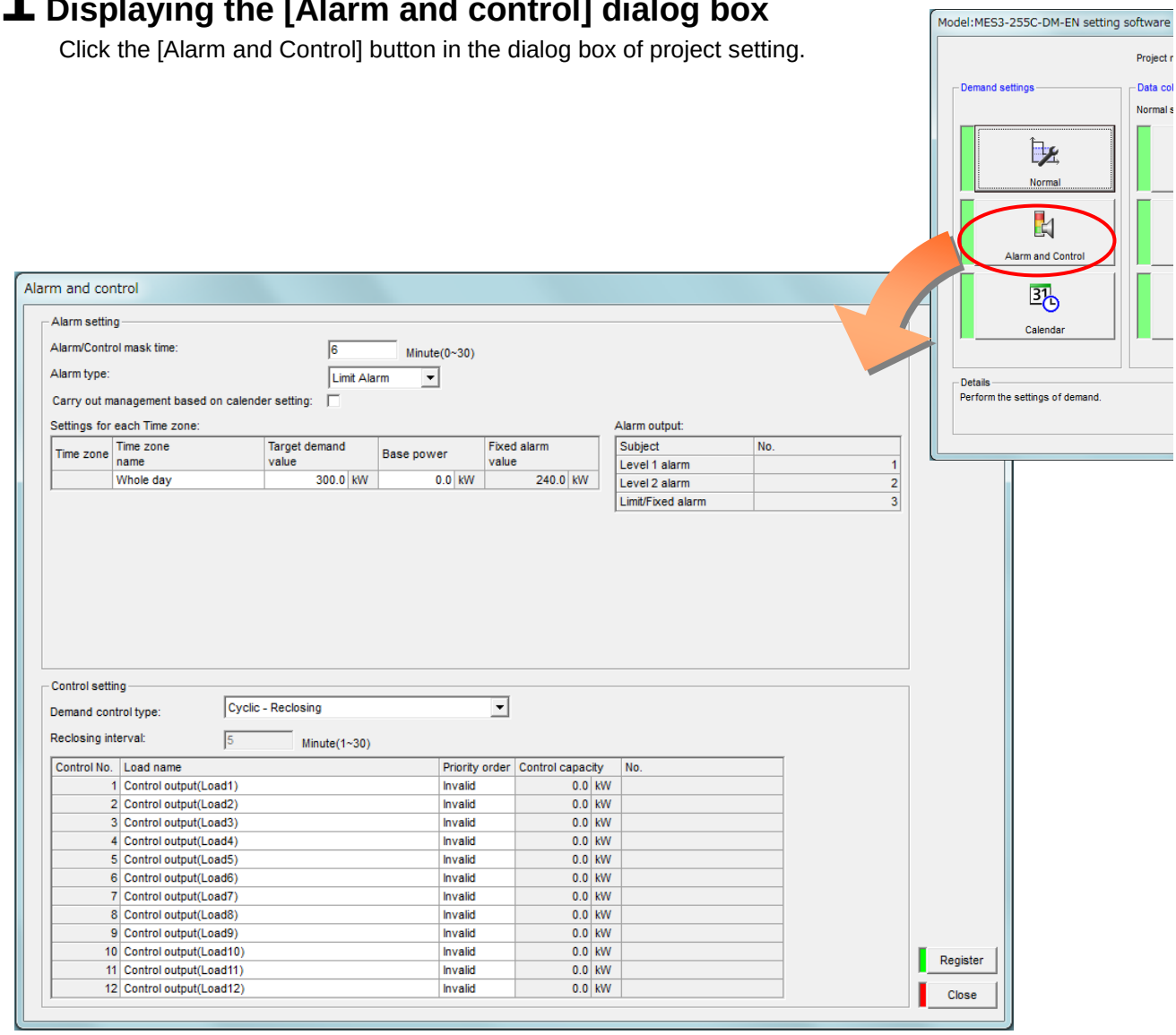
***1 Confirmed the setting and when writing to EcoWebServerIII, save and write of the project.**
***2 Setting is enabled after the start (the end) of the next demand time limit (when the remaining time reaches 30:00 (time limit = 30 min)). Until then, work with the previous setting.**
(The electric energy calculation is immediately reflected.)
***3 Writing the project by 5 minutes before the start (the end) of the demand time limit.**

Editing a registered demand alarm and control information

This section described how to edit an information of registered demand alarm and control.

1 Displaying the [Alarm and control] dialog box

Click the [Alarm and Control] button in the dialog box of project setting.



2 Editing the items to be changed, and registering them

Click the [Register] button after editing items you want to change.
* The entries and conditions for each item are similar to the first registration.

***1 Confirmed the setting and when writing to EcoWebServerIII, save and write of the project.**
***2 Setting is enabled after the start (the end) of the next demand time limit (when the remaining time reaches 30:00 (time limit = 30 min)). Until then, work with the previous setting.**
(The electric energy calculation is immediately reflected.)
***3 Writing the project by 5 minutes before the start (the end) of the demand time limit.**

4.3.7. Demand calendar setting（Only when carrying out management based on calendar setting）

This section described how to set the demand calendar.
In the demand calendar setting, set the daily pattern definition and the calendar definition (daily pattern allocation).

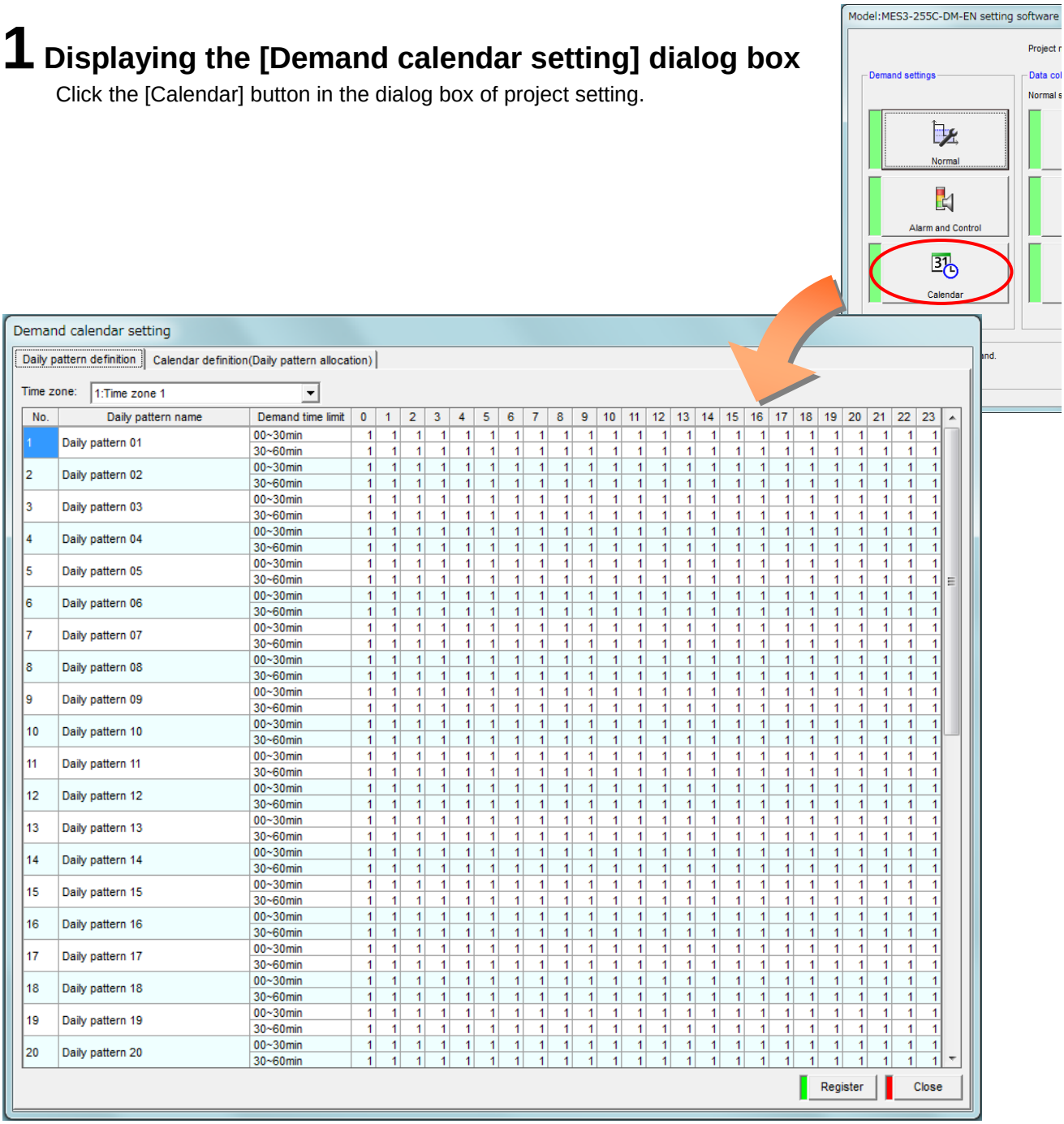
*** When carrying out the season and time zone management, refer to [4.3.6. demand control and setting (4)When carrying out the season and time zone management], check the [Carry out management based on calendar setting], and set the time zone name.**

Define the daily pattern

This section described how to set the daily pattern.

1 Displaying the [Demand calendar setting] dialog box

Click the [Calendar] button in the dialog box of project setting.



Remarks

•Display the following by the demand time limit that is set in the [Normal] dialog box.

[Demand time limit = 15 min]

No.	Daily pattern name	Demand time limit	0	1
1		00~15min	1	1
		15~30min	1	1
		30~45min	1	1
		45~60min	1	1

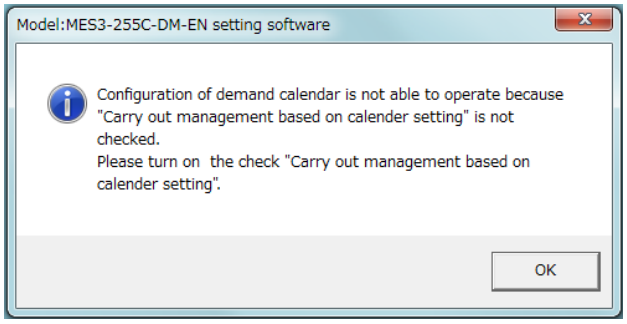
[Demand time limit = 30 min]

No.	Daily pattern name	Demand time limit	0	1
1		00~30min	1	1
		30~60min	1	1

[Demand time limit = 60 min]

No.	Daily pattern name	Demand time limit	0	1
1		00~60min	1	1

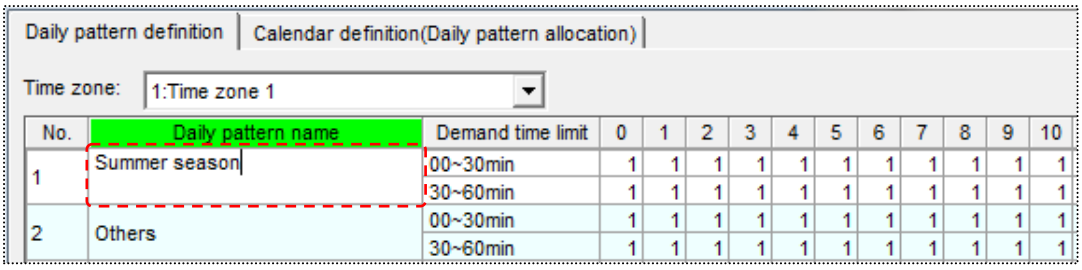
・When the [Carry out management based on calendar setting] is not checked, the following message will be displayed.
Check the [Carry out management based on calendar setting] in the [Alarm and control] dialog box.


Model:MES3-255C-DM-EN setting software
Configuration of demand calendar is not able to operate because "Carry out management based on calender setting" is not checked.
Please turn on the check "Carry out management based on calender setting".
OK

2 Setting the daily pattern

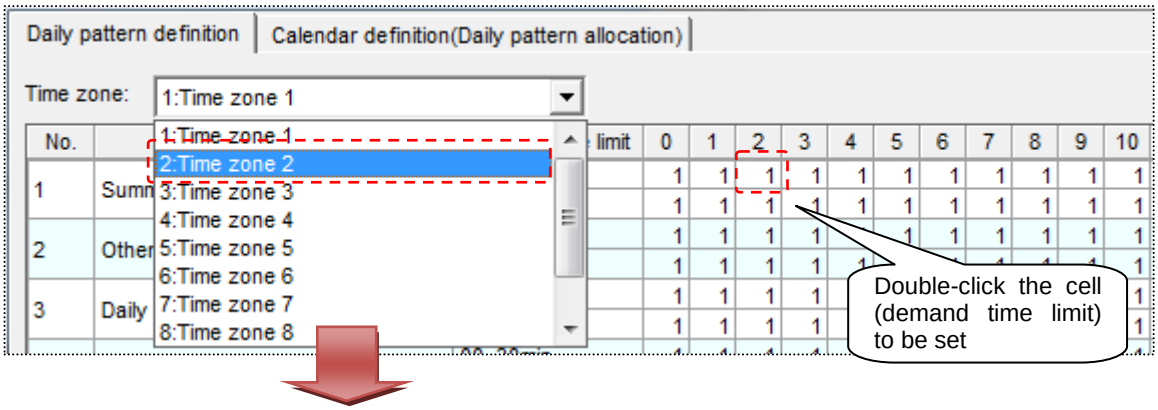
In the [Daily pattern definition], set the daily pattern such as weekdays and holidays.

(1) Double-click the [Daily pattern name] and inputting the daily pattern name.

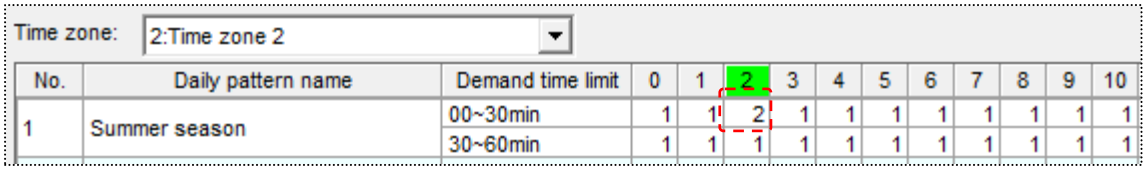

Daily pattern definition
Calendar definition(Daily pattern allocation)
Time zone: 1:Time zone 1
No. | Daily pattern name | Demand time limit | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10
1 | Summer season | 00~30min | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1
30~60min | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1
2 | Others | 00~30min | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1
30~60min | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1

*1 Daily pattern name can be input up to 16 characters.
*2 The following characters cannot be registered:
< > , " ¥
*3 Up to 40 can be set.

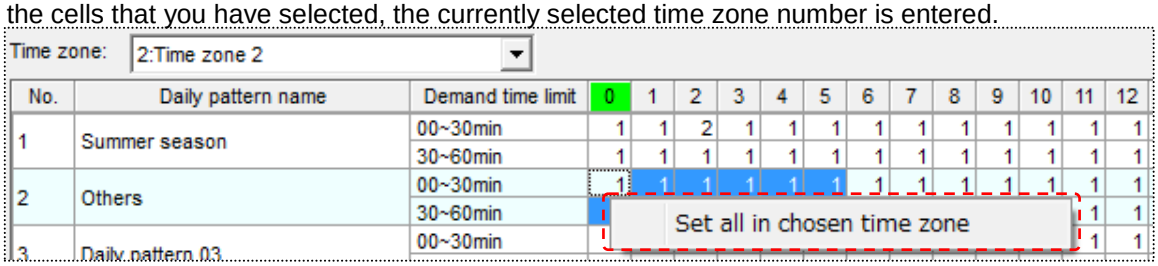
(2) Select the time zone to be set for each demand time limit of the daily pattern.



You can set the time zone for each cell (each demand time).
If you double-click the cell, the currently selected time zone number (1-10) is input.

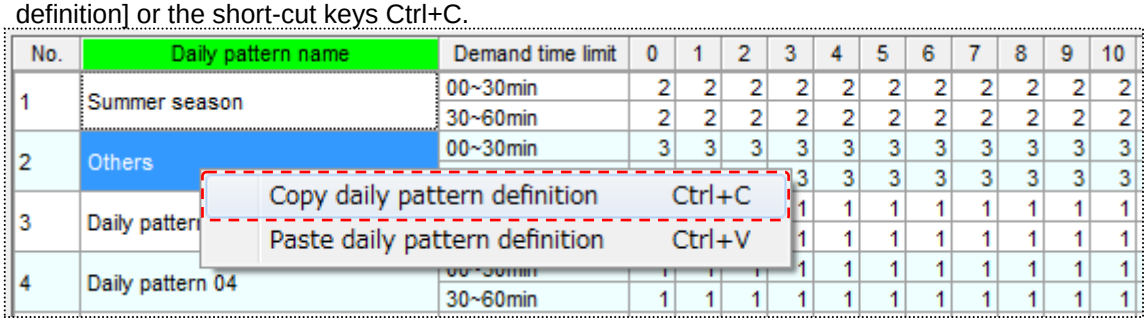

Time zone: 2:Time zone 2
No. | Daily pattern name | Demand time limit | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10
1 | Summer season | 00~30min | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1
30~60min | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1

(3) Select a time zone to be set and clicking the right-click menu [Set all in chosen time zone]. For all of the cells that you have selected, the currently selected time zone number is entered.


Time zone: 2:Time zone 2
No. | Daily pattern name | Demand time limit | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12
1 | Summer season | 00~30min | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1
30~60min | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1
2 | Others | 00~30min | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1
30~60min
3 | Daily pattern 03 | 00~30min
Set all in chosen time zone

<Copying daily pattern definition>

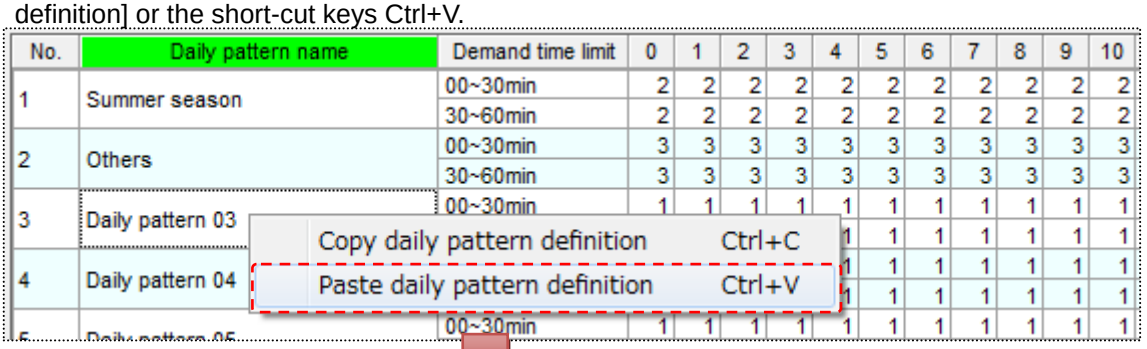
The daily pattern definition can be copied row by row. (Multiple lines possible)
Select the [Daily pattern name] or [No.] to copy and press the right-click menu [Copy daily pattern definition] or the short-cut keys Ctrl+C.



No.	Daily pattern name	Demand time limit	0	1	2	3	4	5	6	7	8	9	10
1	Summer season	00~30min	2	2	2	2	2	2	2	2	2	2	2
		30~60min	2	2	2	2	2	2	2	2	2	2	2
2	Others	00~30min	3	3	3	3	3	3	3	3	3	3	3
		30~60min	3	3	3	3	3	3	3	3	3	3	3
3	Daily patter	00~30min	1	1	1	1	1	1	1	1	1	1	1
		30~60min	1	1	1	1	1	1	1	1	1	1	1
4	Daily pattern 04	00~30min	1	1	1	1	1	1	1	1	1	1	1
		30~60min	1	1	1	1	1	1	1	1	1	1	1

<Pasting daily pattern definition>

The daily pattern definition can be pasted row by row. (Multiple lines possible)
Select the [Daily pattern name] or [No.] to paste and press the right-click menu [Paste daily pattern definition] or the short-cut keys Ctrl+V.



No.	Daily pattern name	Demand time limit	0	1	2	3	4	5	6	7	8	9	10
1	Summer season	00~30min	2	2	2	2	2	2	2	2	2	2	2
		30~60min	2	2	2	2	2	2	2	2	2	2	2
2	Others	00~30min	3	3	3	3	3	3	3	3	3	3	3
		30~60min	3	3	3	3	3	3	3	3	3	3	3
3	Daily pattern 03	00~30min	1	1	1	1	1	1	1	1	1	1	1
		30~60min	1	1	1	1	1	1	1	1	1	1	1
4	Daily pattern 04	00~30min	1	1	1	1	1	1	1	1	1	1	1
		30~60min	1	1	1	1	1	1	1	1	1	1	1
5	Daily pattern 05	00~30min	1	1	1	1	1	1	1	1	1	1	1
		30~60min	1	1	1	1	1	1	1	1	1	1	1

No.	Daily pattern name	Demand time limit	0	1	2	3	4	5	6	7	8	9	10
1	Summer season	00~30min	2	2	2	2	2	2	2	2	2	2	2
		30~60min	2	2	2	2	2	2	2	2	2	2	2
2	Others	00~30min	3	3	3	3	3	3	3	3	3	3	3
		30~60min	3	3	3	3	3	3	3	3	3	3	3
3	Summer season-3	00~30min	2	2	2	2	2	2	2	2	2	2	2
		30~60min	2	2	2	2	2	2	2	2	2	2	2
4	Others-4	00~30min	3	3	3	3	3	3	3	3	3	3	3
		30~60min	3	3	3	3	3	3	3	3	3	3	3
5	Daily pattern 05	00~30min	1	1	1	1	1	1	1	1	1	1	1
		30~60min	1	1	1	1	1	1	1	1	1	1	1

Remarks

- The "-"+ pasted line No. is automatically added to the end of the pasted daily pattern name.

(Example) When the [Summer season] is pasted to line No.3,
[Summer season-3]

3 Registering the daily pattern

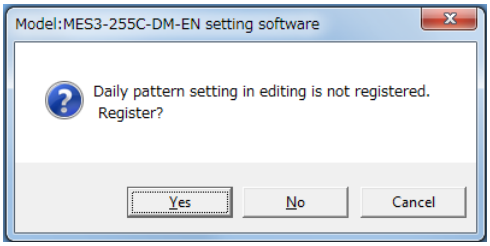
After inputting the daily pattern, daily pattern will be reflected when click the [Register] button.

[Register] button : Register the contents of the set daily pattern.

[Close] button : Back to the [Project setting] dialog box.

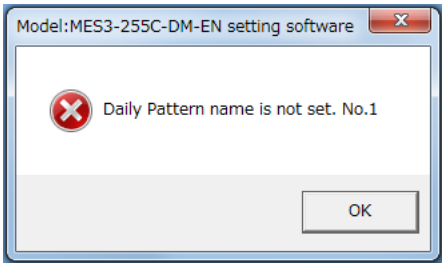
In the case of the following, the message shown on the right will be displayed.

- When clicking the [Close] button without clicking the [Register] button after changing the contents of daily pattern.
- When trying to change to the [Calendar definition (daily pattern allocation)] tab.



[Yes] button : Register
[No] button : Do not register
[Cancel] button : Back to the [Demand calendar setting] dialog box

If there is non-input daily pattern, an error message as shown on the right is displayed.
Set the daily pattern name to all of the daily pattern to be registered.



***1 Confirmed the setting and when writing to EcoWebServerIII, save and write of the project.**
***2 Setting is enabled after the start (the end) of the next demand time limit (when the remaining time reaches 30:00 (time limit = 30 min)). Until then, work with the previous setting.**
(The electric energy calculation is immediately reflected.)
***3 Writing the project by 5 minutes before the start (the end) of the demand time limit.**

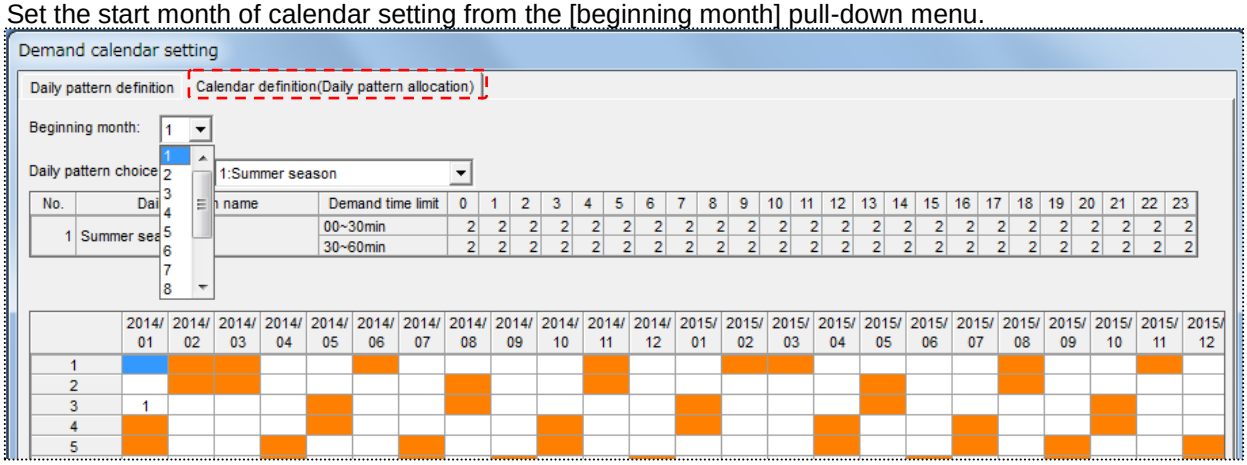
Define the calendar

This section described how to set the calendar.

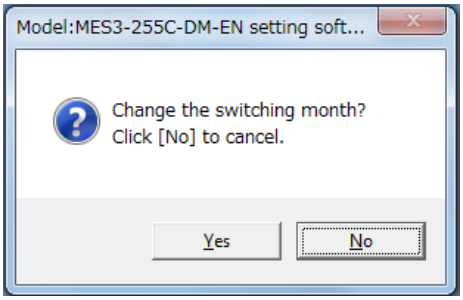
1 Setting the calendar

Set the [daily pattern] for each day.

(4) Select the [Calendar definition (Daily pattern allocation)] tab.
(5) Set the start month of calendar setting from the [beginning month] pull-down menu.

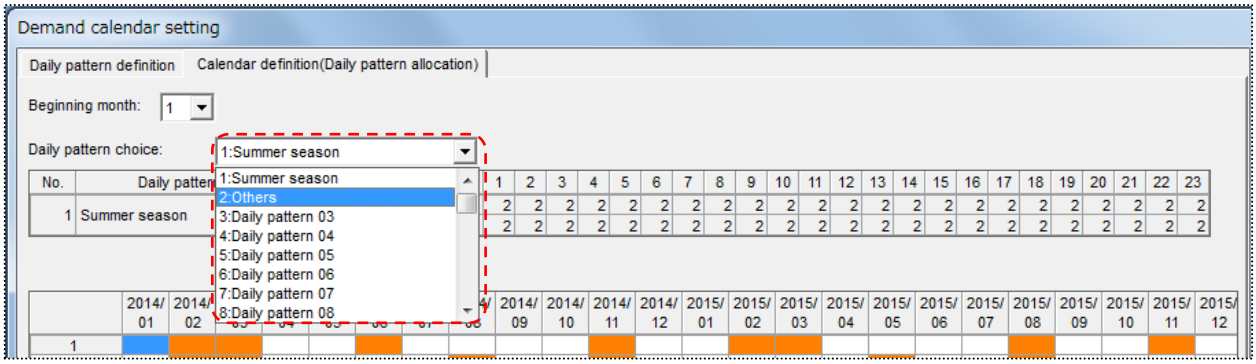


*1 Beginning month can be selected from 1 to 12.
Set the calendar start month of [management based on calendar setting].
*2 At the same time as the set of beginning month, display of the calendar setting list is updated.
*3 If you change the [beginning month], the message shown on the right will be displayed.
If you want to cancel the changes, click the "No".



2 Select the daily pattern

Daily pattern registered in [Daily pattern definition] tab are listed in the [Daily pattern choice] pull-down menu.
Select the daily pattern to be set for each date of the calendar.

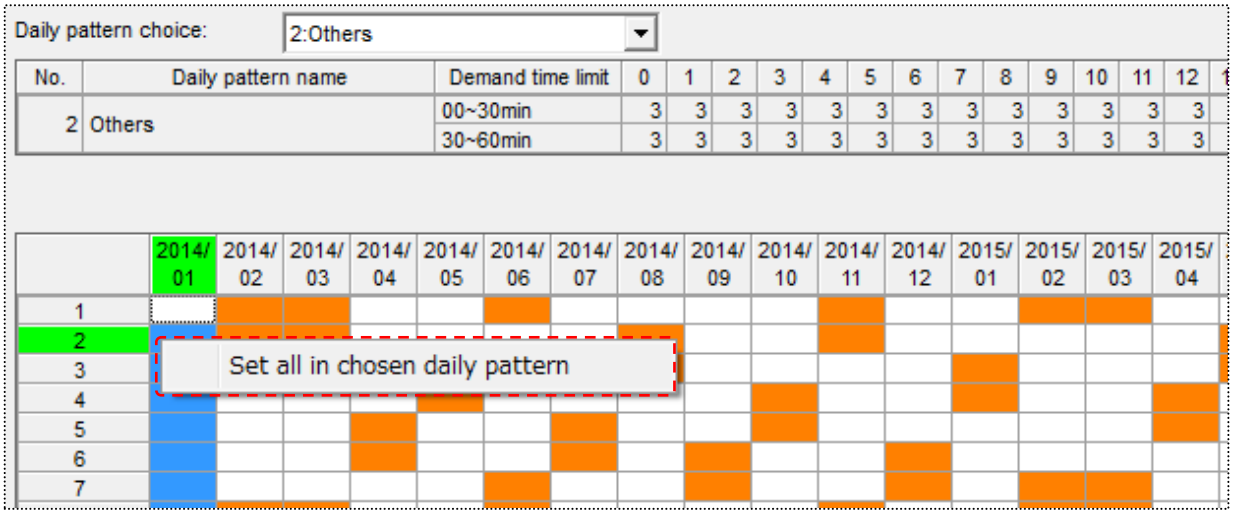


*1 Time zone of the daily pattern selected is displayed to daily pattern display area.

3 Setting the calendar

In the calendar setting list, set the daily pattern for each date.

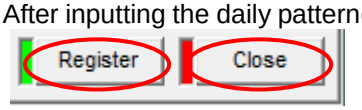
(6) When double-clicking the cell of the date, currently selected number of daily pattern will be input.



*1 By clicking the right-click menu [Set all in chosen daily pattern], you can set the daily pattern for all cells currently selected.

4 Registering the calendar

After inputting the daily patternof calendar, the calendar will be reflected when click the [Register] button.

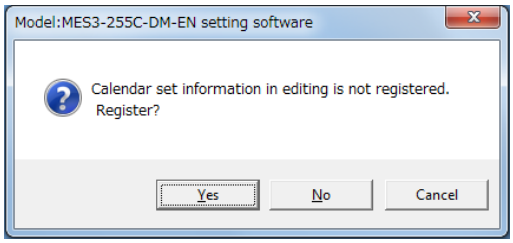


[Register] button : Register the contents of the set calendar.

[Close] button : Back to the [Project setting] dialog box.

In the case of the following, the message shown on the right will be displayed.

- When clicking the [Close] button without clicking the [Register] button after changing the contents of calendar.
- When trying to change to the [Daily pattern definition] tab.



[Yes] button : Register
[No] button : Do not register
[Cancel] button : Back to the [Demand calendar setting] dialog box

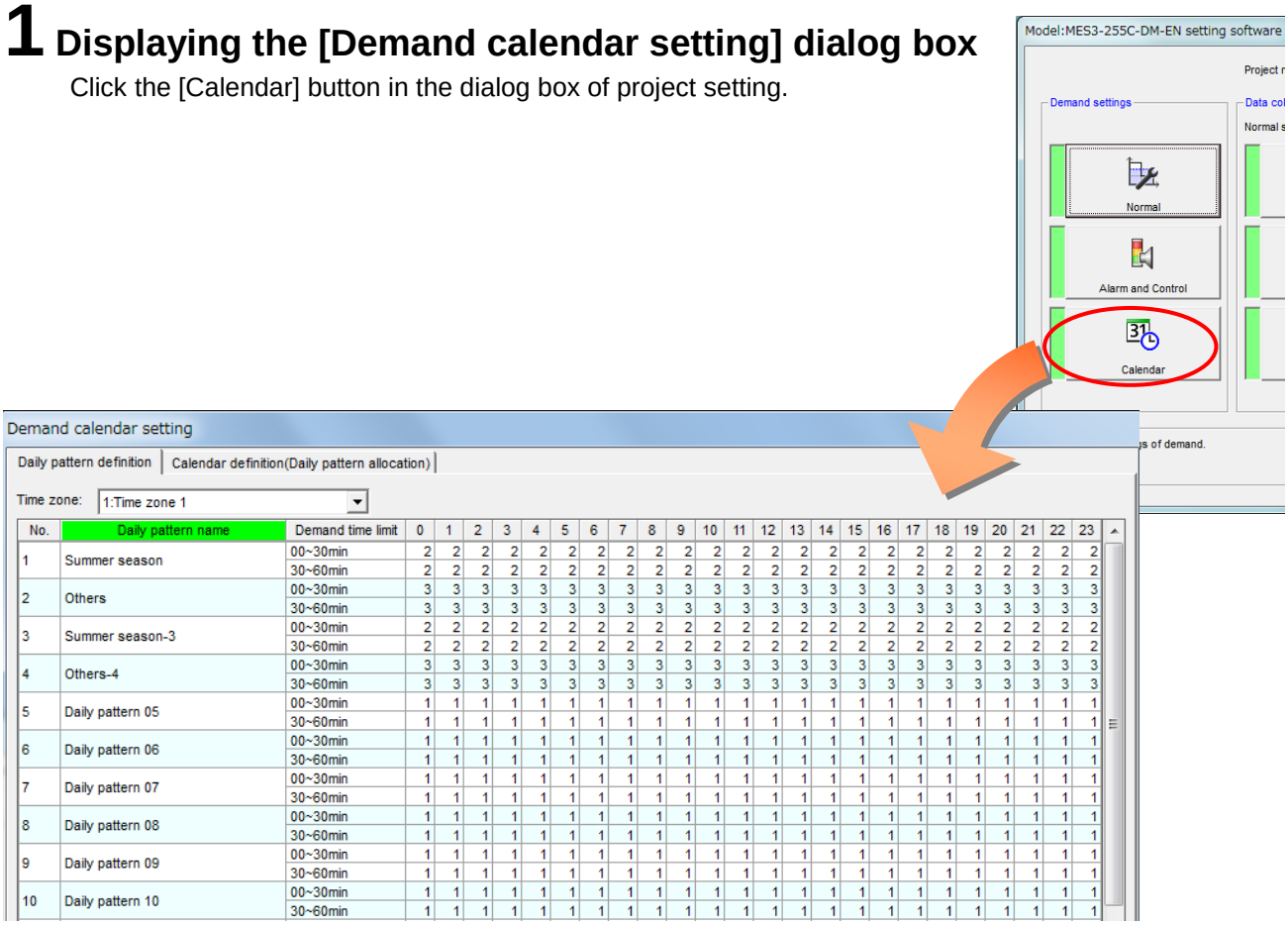
***1 Confirmed the setting and when writing to EcoWebServerIII, save and write of the project.**
***2 Setting is enabled after the start (the end) of the next demand time limit (when the remaining time reaches 30:00 (time limit = 30 min)). Until then, work with the previous setting.**
(The electric energy calculation is immediately reflected.)
***3 Writing the project by 5 minutes before the start (the end) of the demand time limit.**

Editing a registered calendar setting

This section described how to edit an information of registered calendar.

1 Displaying the [Demand calendar setting] dialog box

Click the [Calendar] button in the dialog box of project setting.



No.	Daily pattern name	Demand time limit	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	Summer season	00~30min	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
		30~60min	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
2	Others	00~30min	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		30~60min	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
3	Summer season-3	00~30min	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
		30~60min	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
4	Others-4	00~30min	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		30~60min	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
5	Daily pattern 05	00~30min	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		30~60min	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
6	Daily pattern 06	00~30min	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		30~60min	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7	Daily pattern 07	00~30min	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		30~60min	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8	Daily pattern 08	00~30min	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		30~60min	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9	Daily pattern 09	00~30min	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		30~60min	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10	Daily pattern 10	00~30min	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		30~60min	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

2 Editing the items to be changed, and registering them

Click the [Register] button after editing items you want to change.
* The entries and conditions for each item are similar to the first registration.

***1 Confirmed the setting and when writing to EcoWebServerIII, save and write of the project.**
***2 Setting is enabled after the start (the end) of the next demand time limit (when the remaining time reaches 30:00 (time limit = 30 min)). Until then, work with the previous setting.**
(The electric energy calculation is immediately reflected.)
***3 Writing the project by 5 minutes before the start (the end) of the demand time limit.**

4.4. Measuring Data Collection Settings [Normal Settings]

This section explains the "Terminal registration", "Measuring point registration" and "Group registration" procedures that are necessary for system operations.

4.4.1. CC-Link terminal registration

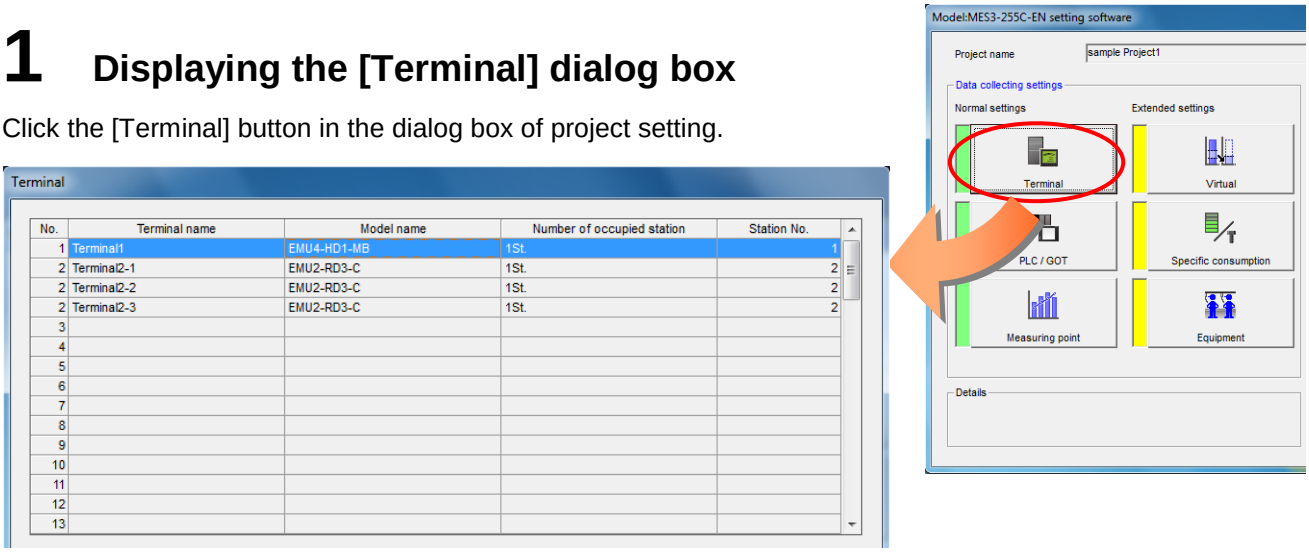
This section explains the procedures on the [CC-Link terminal registration].
A maximum of 64 terminals can be registered.
(* Number of terminals that can be registered varies depending on the settings.)

Checking the list of registered terminals

The following describes how to display and check the list of registered terminals:

1 Displaying the [Terminal] dialog box

Click the [Terminal] button in the dialog box of project setting.



2 Checking the registration information

Check the following information displayed in the [Terminal]

[No.]	: Terminal No. (*1)
[Terminal name]	: Registered terminal name
[Model name]	: Registered model name
[Number of occupied stations]	: No. of stations occupied by registered terminal (*2)
[Station No.]	: Registered station No.

*1 For the multi-circuit product (EMU2-RD3-C, etc.), one circuit is shown per line, and the same terminal No. is shown for each circuit.
(This is because the terminal information such as the rated voltage can be set for each measuring circuit.)

*2 The No. of occupied stations varies depending on the selected model.

Registering a new terminal

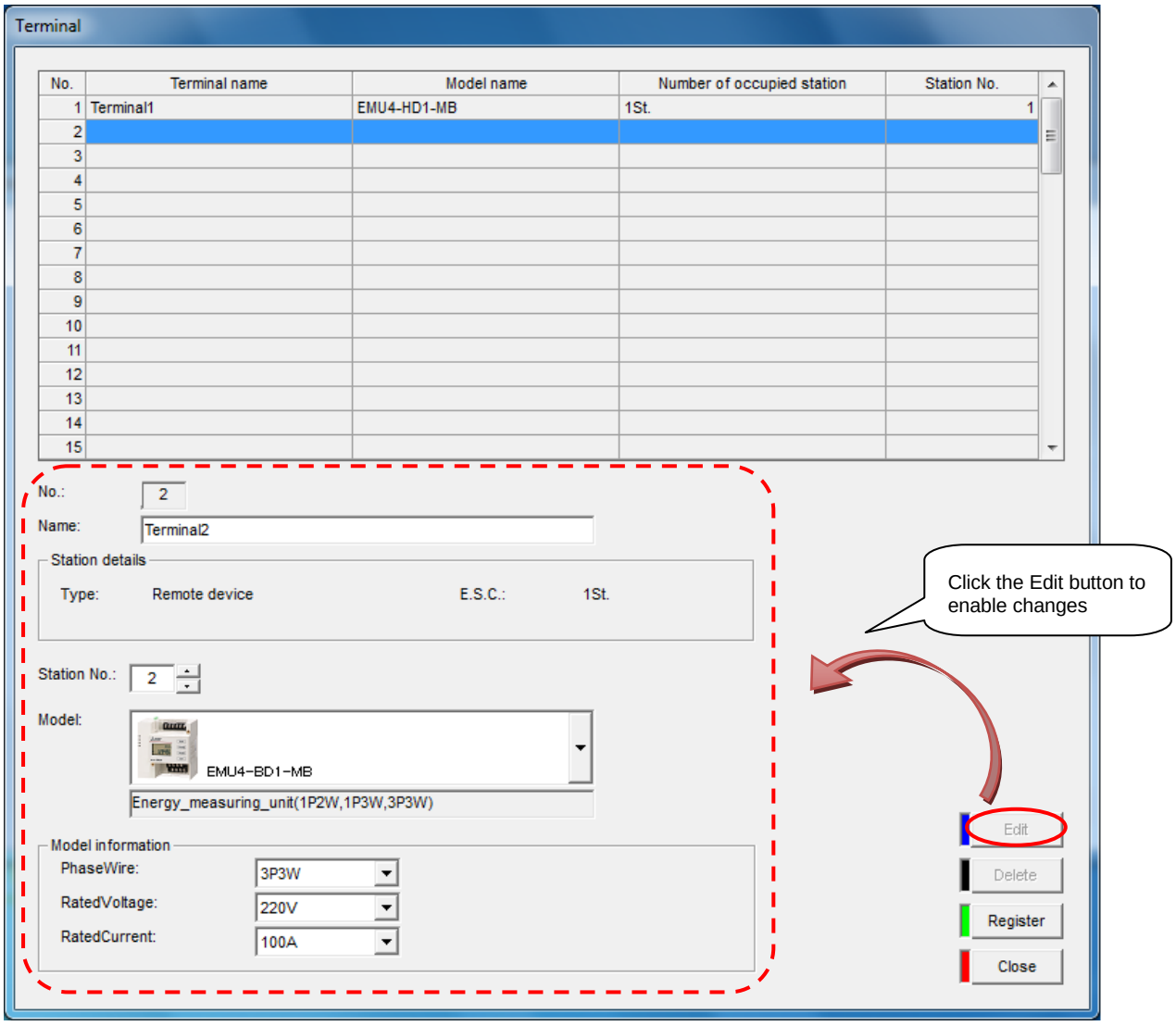
This section described how to register a new terminal.

1 Displaying the [Terminal] dialog box

Click the [Terminal registration] button in the dialog box of project setting.

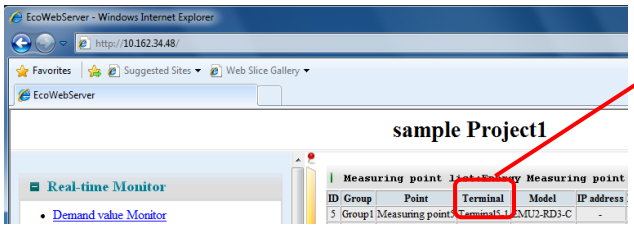
2 Selecting the line to register, and clicking the [Edit] button

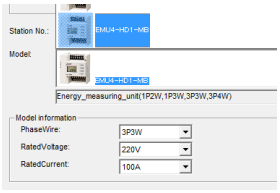
Double-click the line to register in the [Terminal], or select the line to register and click the [Edit] button.
The default value for each item is displayed in the terminal information.



3 Entering or selecting each item

Enter or select the following items.

<table>
<tr><td>[Name]</td><td>Enter the terminal name.
(This terminal name is shown in the list of measuring points on the EcoWebServerIII page.)
 

<table>
<tr><td>Characters</td><td>Up to 24 characters</td></tr>
<tr><td>Prohibited characters</td><td>The following characters cannot be registered:
¥ / : , ; * ? “ < > |</td></tr>
</table>
*1 If you use the characters in the list of the prohibited characters in Appendix, they may not be displayed correctly in the browser view of the EcoWebServerIII.
*2 A duplicate terminal name cannot be registered.
*3 For a multiple-circuit product, "-X" (X is a circuit number) is automatically appended at the end of the terminal name. (Up to 24 characters with "-X".)</td></tr>
<tr><td>[Station No.]</td><td>Set the same number as the one set in the terminal.
<table>
<tr><td>Range</td><td>1 - 64</td></tr>
</table>
*1 A duplicate station number cannot be registered.
*2 Note that the number of occupied stations varies depending on the models.
(Ex.) When the terminal having 4 occupied stations is set to the station number 64, the out-of-range error occurs because the station numbers from 64 to 67 are occupied.
*3 Set the station number to satisfy the following condition.
{(16×(A+D))+(54×B)+(88×C)}≤ 2304
A: Number of terminals in the remote I/O station
B: Number of terminals in the remote device station
C: Number of terminals in the intelligent device station
D: Number of terminals in the reserved station
(Station type, Number of occupied stations ☞ Refer to “5.4 List of supported terminals")
*4 Setting range of QJ61BT11N/LCPU/LJ61BT11 is from 1 to 63.</td></tr>
<tr><td>[Model:]</td><td>Select a model.
Available models :
(☞ Refer to “5.4 List of supported terminals")
 

* When collecting data from the QCPU device via CC-Link, select "QJ61BT11N (CC-Link master/local unit (local station)".
* When collecting data from the LCPU device, select "LCPU/LJ61BT11 (CC-Link master/local unit (local station)”.</td></tr>
<tr><td>[Model information]</td><td>Set the model information.
* The setting items will differ according to the model
(☞Refer to “5.5 List of model information”.)
</td></tr>
</table>

Remarks

- [Station type] and [Number of occupied stations are determined by the selected model. (☞ Refer to **“5.4 List of supported terminals"**.)

✓Additional information:

Reserve station

The unregistered station number between 1 and the max. number is counted as a reserve station.

The number of reserve stations is included in the term of the conditional expression of the terminal number error. Please be careful.

$$\{(16 \times (A + D)) + (54 \times B) + (88 \times C)\} \leq 2304$$

A: Number of terminals in the remote I/O station
B: Number of terminals in the remote device station
C: Number of terminals in the intelligent device station
D: Number of terminals in the reserve station

(Ex.) EMU2-RD1-C (terminal of a remote device station) is registered in the station number 1 to 41 and 64.

⇒The station number 42 to 63 become the reserve station, and then

$\{(16 \times (0 + 22)) + (54 \times 41) + (88 \times 0)\} = 2566 > 2304$

causes an error because the conditional expression is not satisfied.

4 Registering

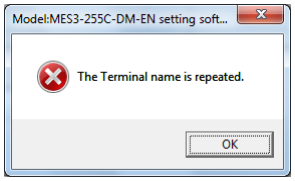
Click the button on the [CC-Link terminal registration] dialog box to register the terminal.

[Register] button : Register the terminal with the settings you made.
The registration information will be reflected to the [Terminals list].

[Close] button : Back to the [Project setting] dialog box.

*1 If the setting is incorrect, the error message such as the one on the right will appear according to the invalid setting when the [Register] button is clicked. Correct the setting to satisfy the conditions.

(Example of display)

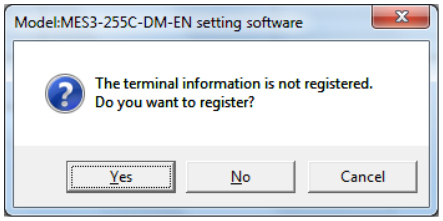


*2 If you click [Close] button without clicking the [Register] button after changing the entry, the message shown on the right will be displayed.

[Yes] : Register

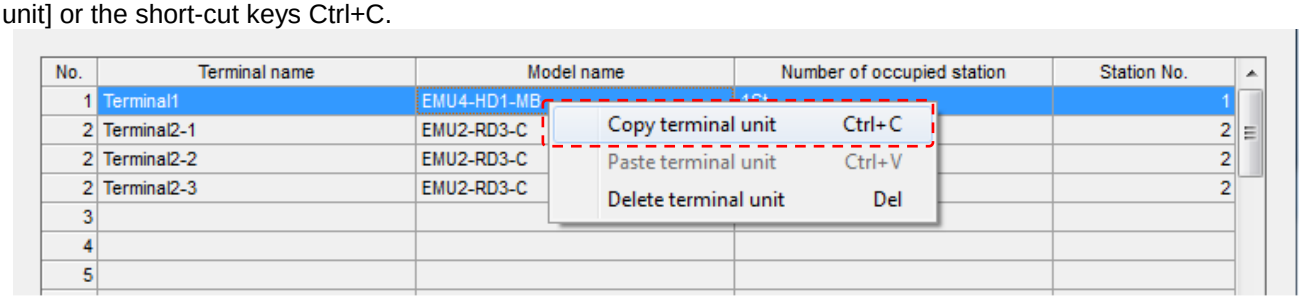
[No] : Do not register

[Cancel] : Return to [CC-Link Terminal registration] dialog box



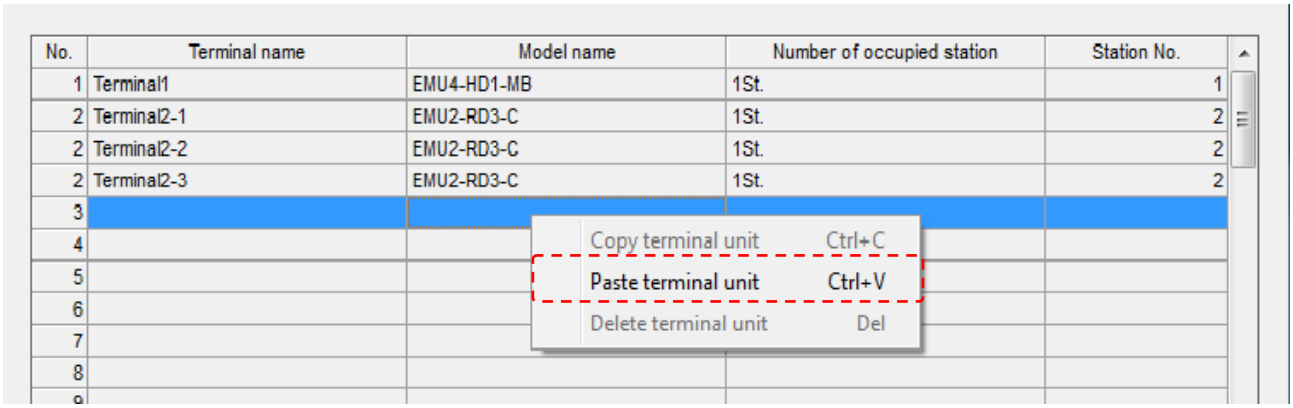
<Copying terminal information>

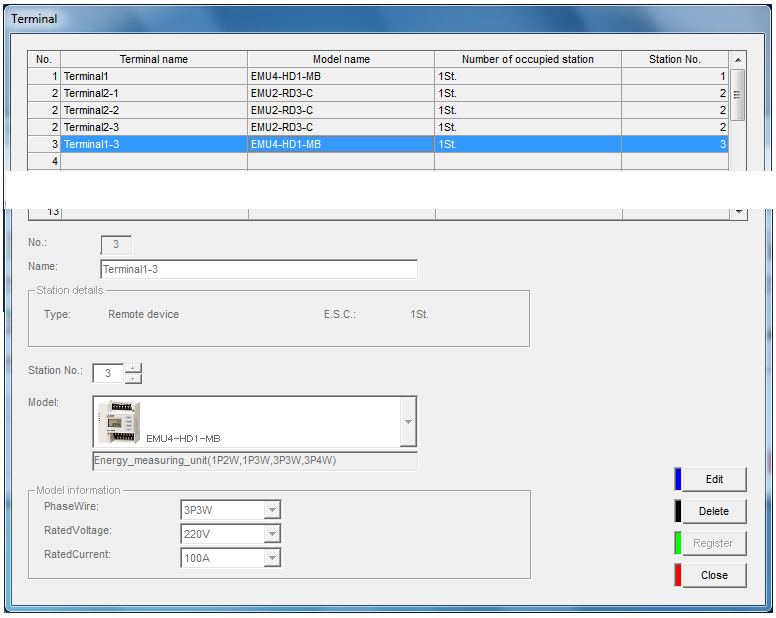
To copy registered terminal information, select the line to copy and press the right-click menu [Copy terminal unit] or the short-cut keys Ctrl+C.



<Pasting terminal information>

To paste the copied terminal information, select the line to paste into, and press the right-click menu [Paste terminal unit] or the short-cut keys Ctrl+V.





Remarks

- Multiple lines for terminals other than multi-circuit parts cannot be copied and pasted.
- Terminal information cannot be pasted into a registered line.
- The “-”+ pasted line No. is automatically added to the end of the pasted terminal name.
- The default value is set in the pasted address.
- The pasted terminal information is automatically registered.

Deleting registered terminal

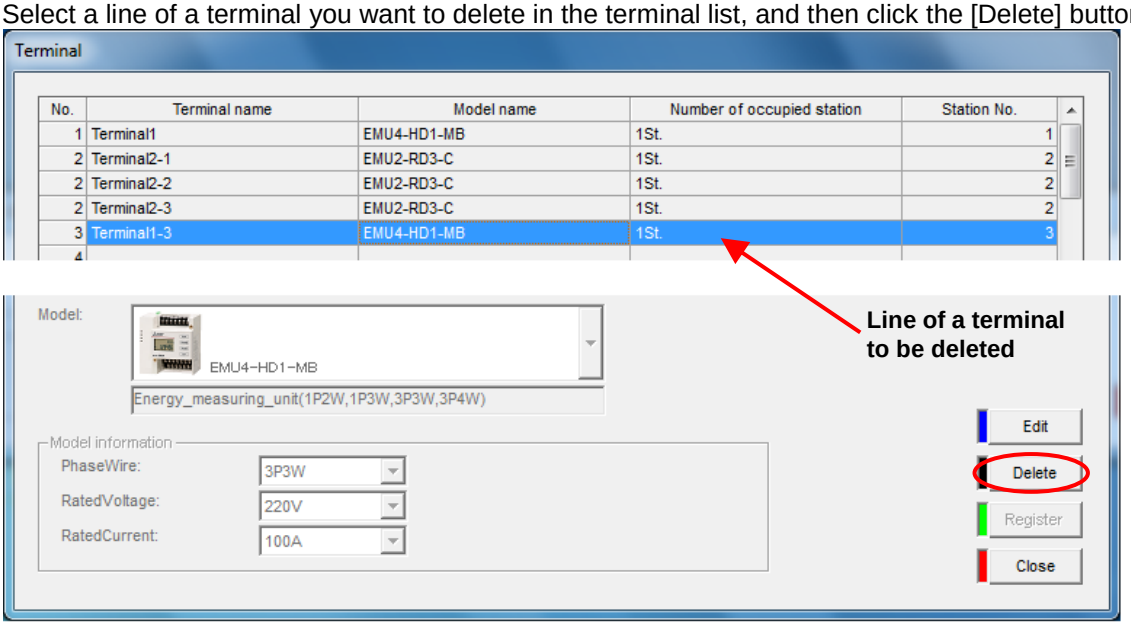
This section described how to delete a registered terminal.

1 Displaying the [Terminal] dialog box

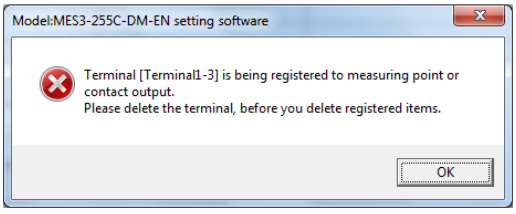
Click the [Terminal] button in the dialog box of project setting.

2 Selecting a terminal you want to delete, and click the [Delete] button

Select a line of a terminal you want to delete in the terminal list, and then click the [Delete] button.

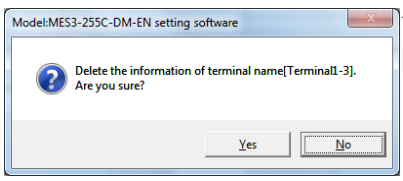


* If the terminal element of the selected terminal is registered as a measuring point, the message shown on the right will be displayed.
Click the [OK] button to delete the measuring point first.


Model:MES3-255C-DM-EN setting software
Terminal [Terminal1-3] is being registered to measuring point or contact output.
Please delete the terminal, before you delete registered items.
OK

3 Deleting

A delete confirmation message appears. Click the button to delete.



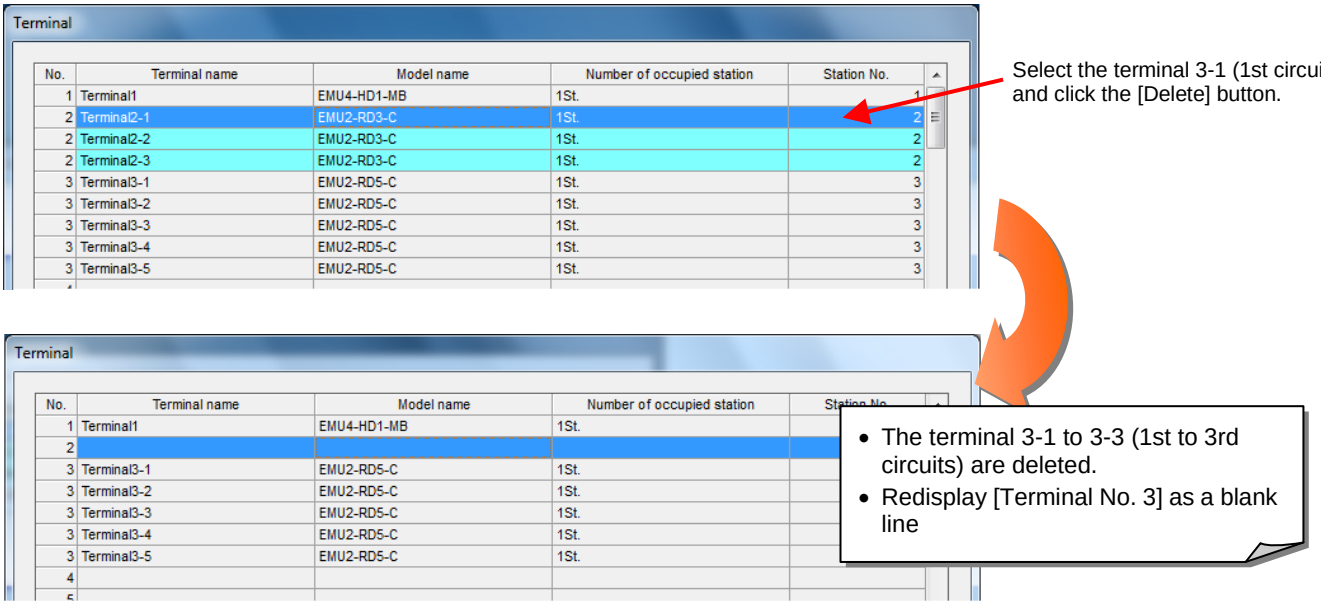
Yes] button : Delete the terminal and back to the [Terminal] dialog box.
[No] button : Cancel the deletion and back to the [Terminal] dialog box.

After the terminal is deleted, its registration information is removed from the terminal list.

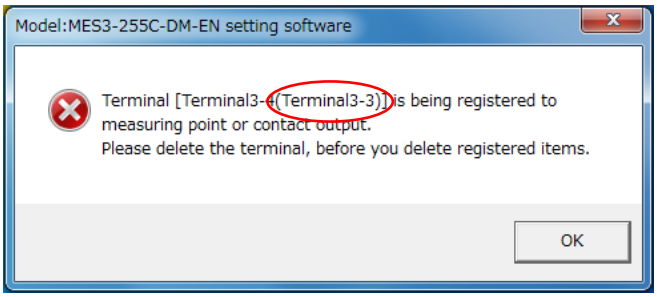
<To delete a multi-circuit product>

To delete a multiple-circuit product (EMU2-RD3-C, etc.), perform the step 1 to 3.
However, if you delete one circuit, the other circuits in the terminal (the terminal in the rows which have the same [No.]) will also be deleted automatically.

(Ex.) The first circuit in the EMU2-RD3-C is deleted.


Terminal
No. | Terminal name | Model name | Number of occupied station | Station No.
1 | Terminal1 | EMU4-HD1-MB | 1St. | 1
2 | Terminal2-1 | EMU2-RD3-C | 1St. | 2
2 | Terminal2-2 | EMU2-RD3-C | 1St. | 2
2 | Terminal2-3 | EMU2-RD3-C | 1St. | 2
3 | Terminal3-1 | EMU2-RD5-C | 1St. | 3
3 | Terminal3-2 | EMU2-RD5-C | 1St. | 3
3 | Terminal3-3 | EMU2-RD5-C | 1St. | 3
3 | Terminal3-4 | EMU2-RD5-C | 1St. | 3
3 | Terminal3-5 | EMU2-RD5-C | 1St. | 3
Select the terminal 3-1 (1st circuit) and click the [Delete] button.
Terminal
No. | Terminal name | Model name | Number of occupied station
1 | Terminal1 | EMU4-HD1-MB | 1St.
2
3 | Terminal3-1 | EMU2-RD5-C | 1St.
3 | Terminal3-2 | EMU2-RD5-C | 1St.
3 | Terminal3-3 | EMU2-RD5-C | 1St.
3 | Terminal3-4 | EMU2-RD5-C | 1St.
3 | Terminal3-5 | EMU2-RD5-C | 1St.
4
• The terminal 3-1 to 3-3 (1st to 3rd circuits) are deleted.
• Redisplay [Terminal No. 3] as a blank line

* If the other circuit in the terminal you select is used in the measuring point, the following message will appear.
Click the [OK] button to delete the measuring point first.


Model:MES3-255C-DM-EN setting software
Terminal [Terminal3-4(Terminal3-3)] is being registered to measuring point or contact output.
Please delete the terminal, before you delete registered items.
OK

The circuit of the terminal whose name is shown in "( )" is registered in the measuring point.

Remarks

- You cannot delete the terminal if it is registered as a measuring point.
  Delete the measuring point first, and then delete this terminal.
- The terminal can also be deleted by clicking the right-click menu [Delete terminal unit] or pressing the “Delete” key.

Editing registration information of a registered terminal

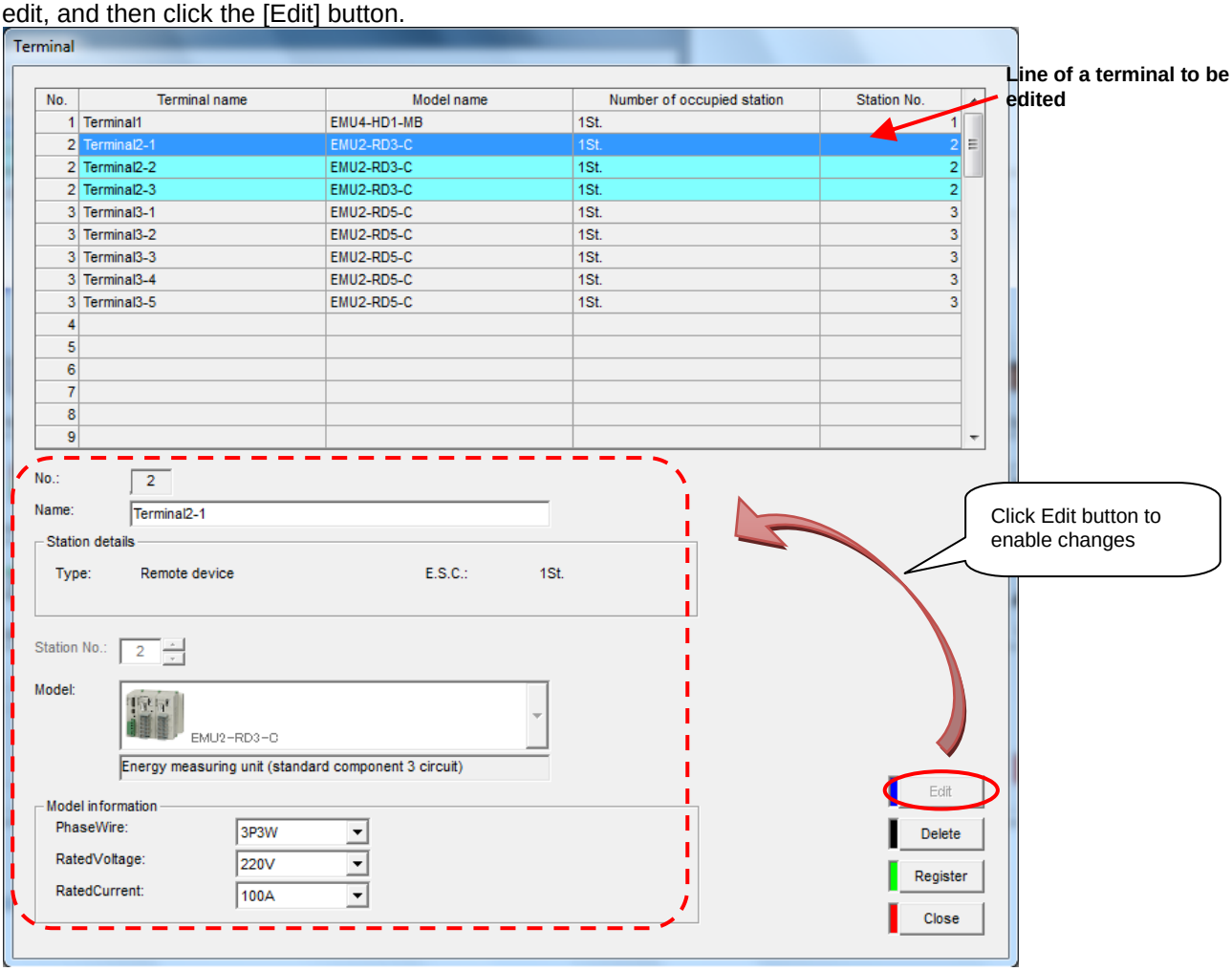
This section described how to edit registration information of a terminal.

1 Displaying the [Terminal] dialog box

Click the [Terminal] button in the dialog box of project setting.

2 Selecting a terminal you want to edit, and click the [Edit] button

Double-click the line of a terminal you want to edit in the terminal list, or select a line of a terminal you want to edit, and then click the [Edit] button.



3 Editing the items to be changed and registering them

Click the [Register] button after editing items you want to change.
* The entries and conditions for each item are similar to those registering a new terminal.

Remarks

- **You cannot edit the [Model] if it is registered in the measuring point. Delete the measuring point first, and then change the model.**
- **You cannot edit the [Model] of a multi-circuit product (EMU2-RD-3-C, etc.). To change the model, delete the terminal first, and then perform a new registration.**

4.4.2. PLC/GOT registration

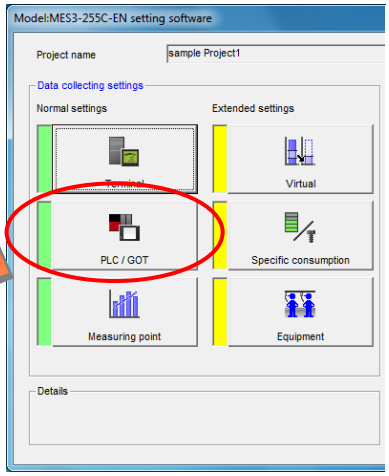
This section describes the procedure on the [Log in PLC/GOT].
In addition to registering terminals as a measuring point, the EcoWebServerIII can read and write the device data to and from a connected PLC/GOT.
A maximum of 32 PLCs and GOT can be registered for acquiring devices.
Refer to **"5.8 PLC communication settings"** for details on the PLC settings.
Refer to **"5.9 GOT communication settings"** for details on the GOT settings.

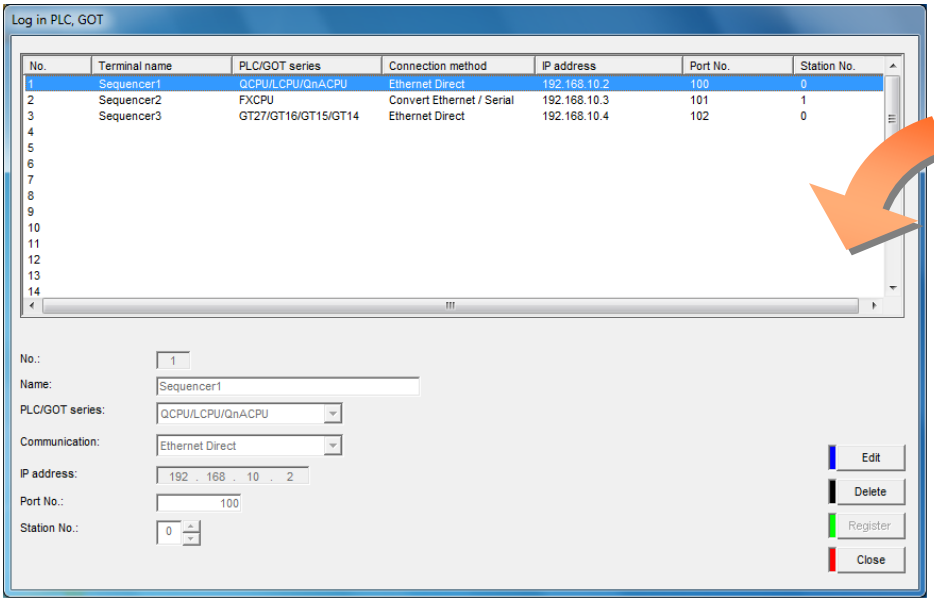
Checking a list of registered PLCs/GOT

The following describes how to display and check the list of registered PLCs/GOT.

1 Displaying the [Log in PLC/GOT] dialog box

Click the [PLC/GOT] button in the dialog box of project setting.





2 Checking the registration information

Check the following information displayed in the terminal list

[No.]	: PLC No.
[Terminal name]	: Name of PLC/GOT
[PLC/GOT series]	: PLC/GOT series
[Connection method]	: Communication type between PLC/GOT and EcoWebServerIII
[IP address]	: IP address of PLC/GOT
[Port No.]	: Port number for Ethernet of PLC/GOT
[Station No.]	: Station number of PLC serial communication when Ethernet/Serial conversion is selected for exchanging data with EcoWebServerIII.

Registering a new PLC/GOT

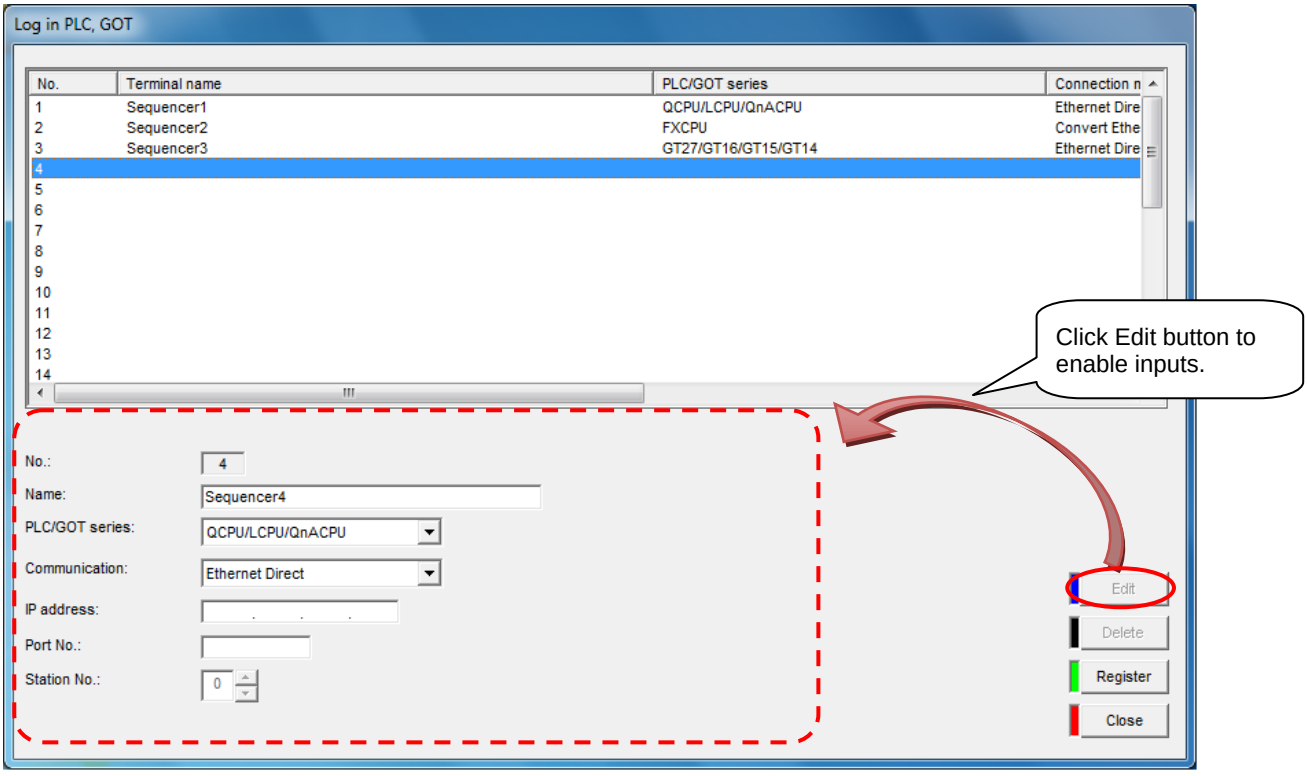
This section described how to register a new PLC/GOT.

1 Displaying the [Log in PLC/GOT] screen

Click the [PLC/GOT] button in the dialog box of project setting.

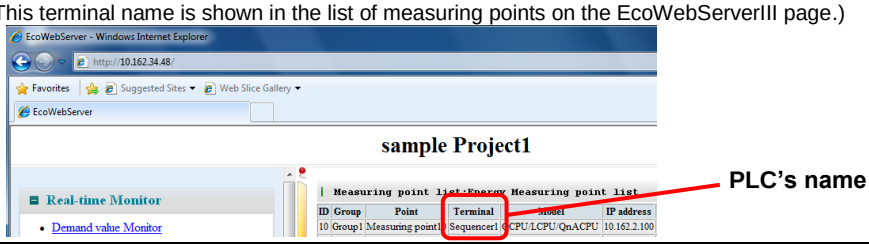
2 Selecting a line to register, and click the [Edit] dialog box

Double-click a line to register in the terminal list or select a line to register, and click the [Edit] button.
The default value is displayed for each item in the PLC/GOT information.



3 Entering or selecting the items

Enter or select the following items.

<table>
<tr><td>[Name]</td><td>Enter a name of a PLC connecting the EcoWebServerIII.
(This terminal name is shown in the list of measuring points on the EcoWebServerIII page.)
 

<table>
<tr><td>Characters</td><td>Up to 24 characters</td></tr>
<tr><td>Prohibited characters</td><td>The following characters cannot be registered:
¥ / : , ; * ? “ < > |</td></tr>
</table>
*1 If you use the characters in the list of the prohibited characters in Appendix, they may not be displayed correctly in the browser view of the EcoWebServerIII.
*2 A duplicate terminal name cannot be registered.</td></tr>
<tr><td>[PLC/GOT series]</td><td>Select from the PLC/GOT connected to EcoWebServerIII.
• QCPU/LCPU/QnACPU
• ACPU
• AnACPU/AnUCPU
• FXCPU
• GT27/GT16/GT15/GT14</td></tr>
<tr><td>[Connection method]</td><td>Communication type between EcoWebServerIII and PLC which select from
• Ethernet Direct
• Convert Ethernet/Serial
For GT27/GT16/GT15/GT14: [Ethernet Direct]
For ACPU, AnACPU/AnUCPU, FXCPU: [Convert Ethernet/Serial]</td></tr>
<tr><td>[IP address]</td><td>Type in the same value as the IP address set for the PLC communicating with the EcoWebServerIII.
[Range of configurable IP address]
<table>
<tr><th>Class</th><th>Host bit of IP address</th><th>IP address range</th></tr>
<tr><td>A</td><td>0</td><td>1.0.0.0～126.255.255.255</td></tr>
<tr><td>B</td><td>10</td><td>128.0.0.0～191.255.255.255</td></tr>
<tr><td>C</td><td>110</td><td>192.0.0.0～223.255.255.255</td></tr>
</table>
*1 The following IP addresses cannot be registered.
- “0.0.0.0”, “xxx.xxx.xxx.255” (xxx are any values)
- The same IP address as that of the client PC</td></tr>
<tr><td>[Port No.]</td><td>Ethernet communication port number
<table>
<tr><td>Range</td><td>0 to 65535</td></tr>
</table></td></tr>
<tr><td>[Station No.]</td><td>When Ethernet/Serial conversion is set for exchanging data between the EcoWebServerIII and PLC, set the station number of the connected serial communication module.
<table>
<tr><td>Range</td><td>0 to 31</td></tr>
</table></td></tr>
</table>

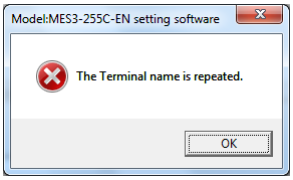
4 Registering

Click the button on the [Log in PLC/GOT] dialog box to register the terminal.

[Register] button : Register the PLC/GOT with the settings you made.
The registration information will be reflected to the dialog box of project setting.
[Close] button : Back to the dialog box of project setting.

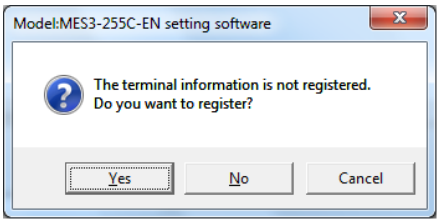
* If the setting is incorrect, the error massage such as the one on the right will appear according to the invalid setting when [Register] button is clicked.
Correct the setting to satisfy the conditions.

(Example of display)



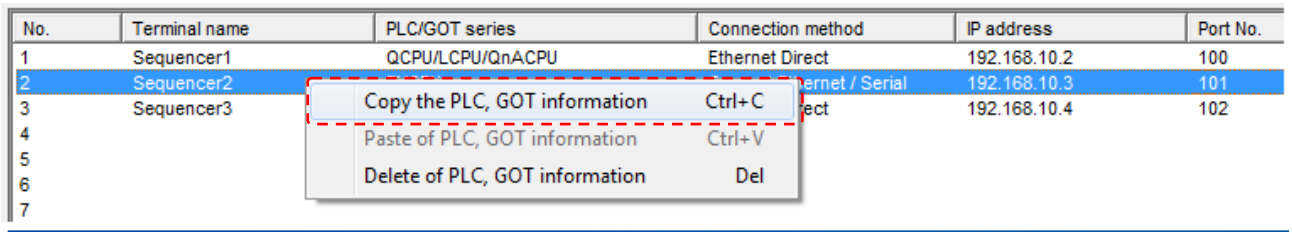
* If you click [Close] button without clicking the [Register] button after changing the entry, the message shown on the right will be displayed.

[Yes] button : Register
[No] button : Not register
[Cancel] button : Back to the [Log in PLC/GOT] dialog box



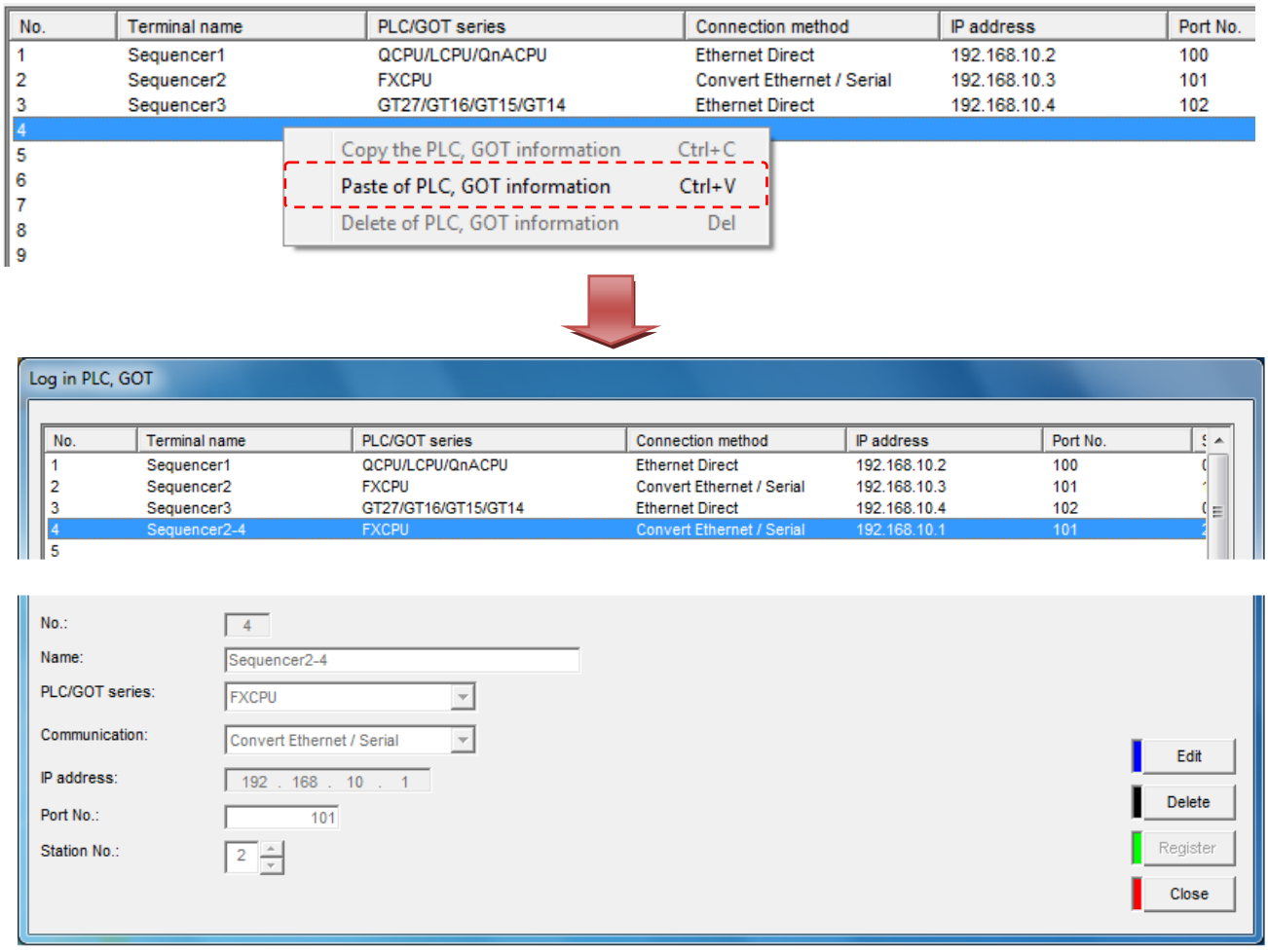
<Copying PLC/GOT information>

To copy registered PLC/GOT information, select the line to copy and press the right-click menu [Copy the PLC, GOT information] or the short-cut keys Ctrl+C.



<Pasting PLC/GOT information>

To paste the copied PLC/GOT information, select the line to paste and press the right-click menu [Paste of PLC, GOT information] or the short-cut keys Ctrl+V.



Remarks

- Multiple lines cannot be copied and pasted.
- PLC/GOT information cannot be pasted into a registered line.
- The “-”+ pasted line No. is automatically added to the end of the pasted terminal name.
- The default value is set in the pasted IP address.
- The pasted PLC/GOT information is automatically registered.

Deleting a registered PLC/GOT

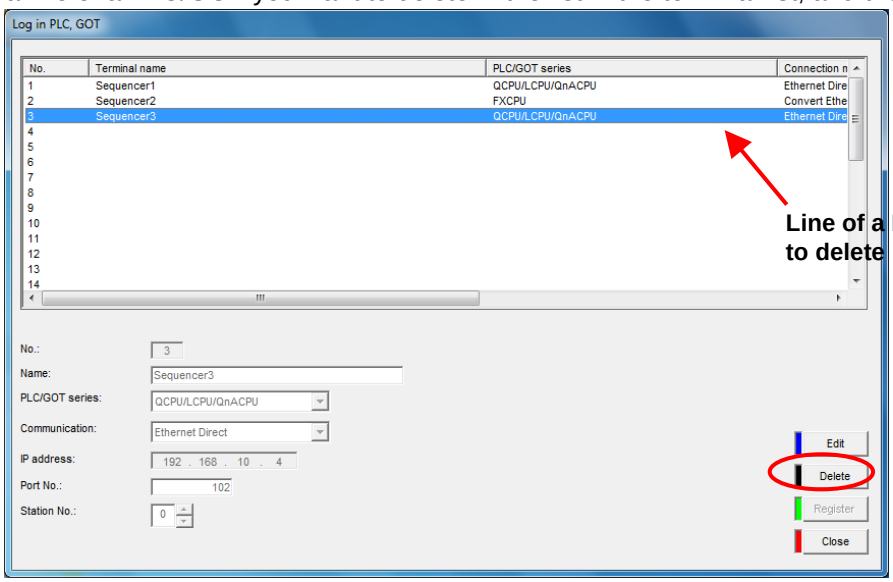
This section described how to delete a registered PLC/GOT.

1 Displaying the [Log in PLC/GOT] dialog box

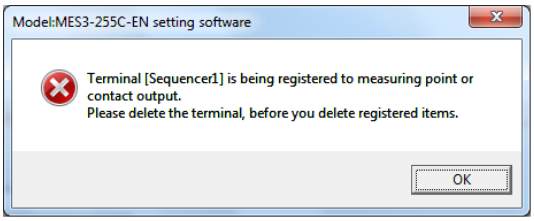
Click the [PLC/GOT] button in the dialog box of project setting.

2 Selecting a PLC/GOT you want to delete, and clicking the [Delete] button

Select a line of a PLC/GOT you want to delete in the list in the terminal list, and then click the [Delete] button

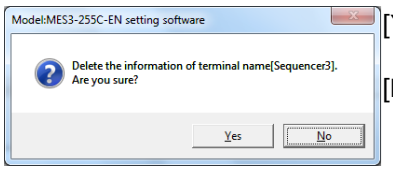


* If the PLC/GOT you select is registered as a measuring point, the message on the right will appear.
Click the [OK] button to delete the measuring point first.


Model:MES3-255C-EN setting software
Terminal [Sequencer1] is being registered to measuring point or contact output.
Please delete the terminal, before you delete registered items.
OK

3 Deleting the project

A delete confirmation message appears. Click the button to delete the terminal.



[Yes] button : Delete the PLC/GOT and back to the [Log in PLC/GOT] dialog box.
[No] button : Cancel the deletion and back to the [Log in PLC/GOT] dialog box.

After the terminal is deleted, its registration information is removed from the terminal list.

Remarks

- The terminal can also be deleted by clicking the right-click menu [Delete of PLC, GOT information] or pressing the “Delete” key.

Editing registration information of a registered PLC/GOT

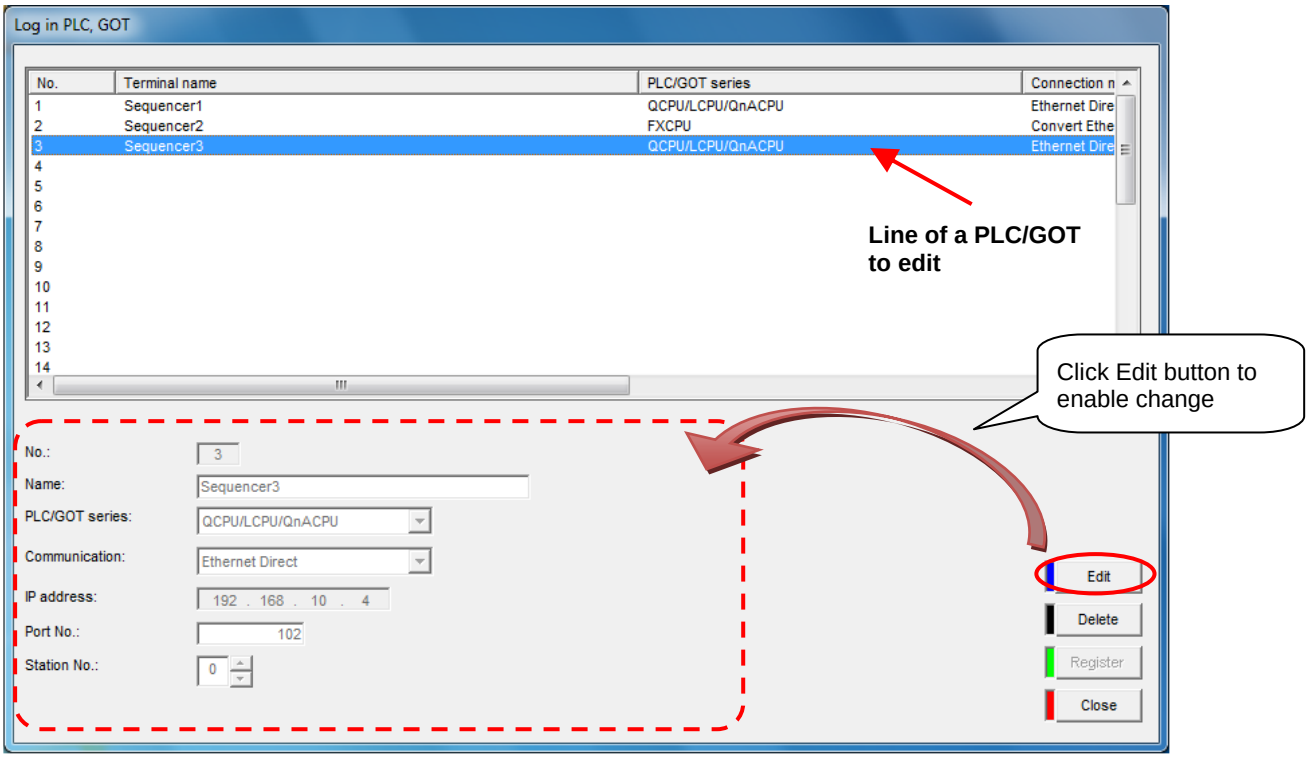
This section described how to edit registration information of a PLC/GOT.

1 Displaying the [Log in PLC/GOT] dialog box

Click the [PLC/GOT] button in the dialog box of project setting.

2 Selecting a PLC/GOT you want to edit, and click the [Edit] button

Select a line of a PLC/GOT you want to edit, and then click the [Edit] button.



3 Editing the items to be changed and registering them

Click the [Register] button after editing items you want to change.

* The entries and conditions for each item are similar to those registering a new PLC/GOT.

Remarks

- **You cannot edit the [PLC/GOT Series] if it's measuring point is registered. Delete the measuring point first, and then edit the PLC/GOT series.**

4.4.3. Measuring point registration

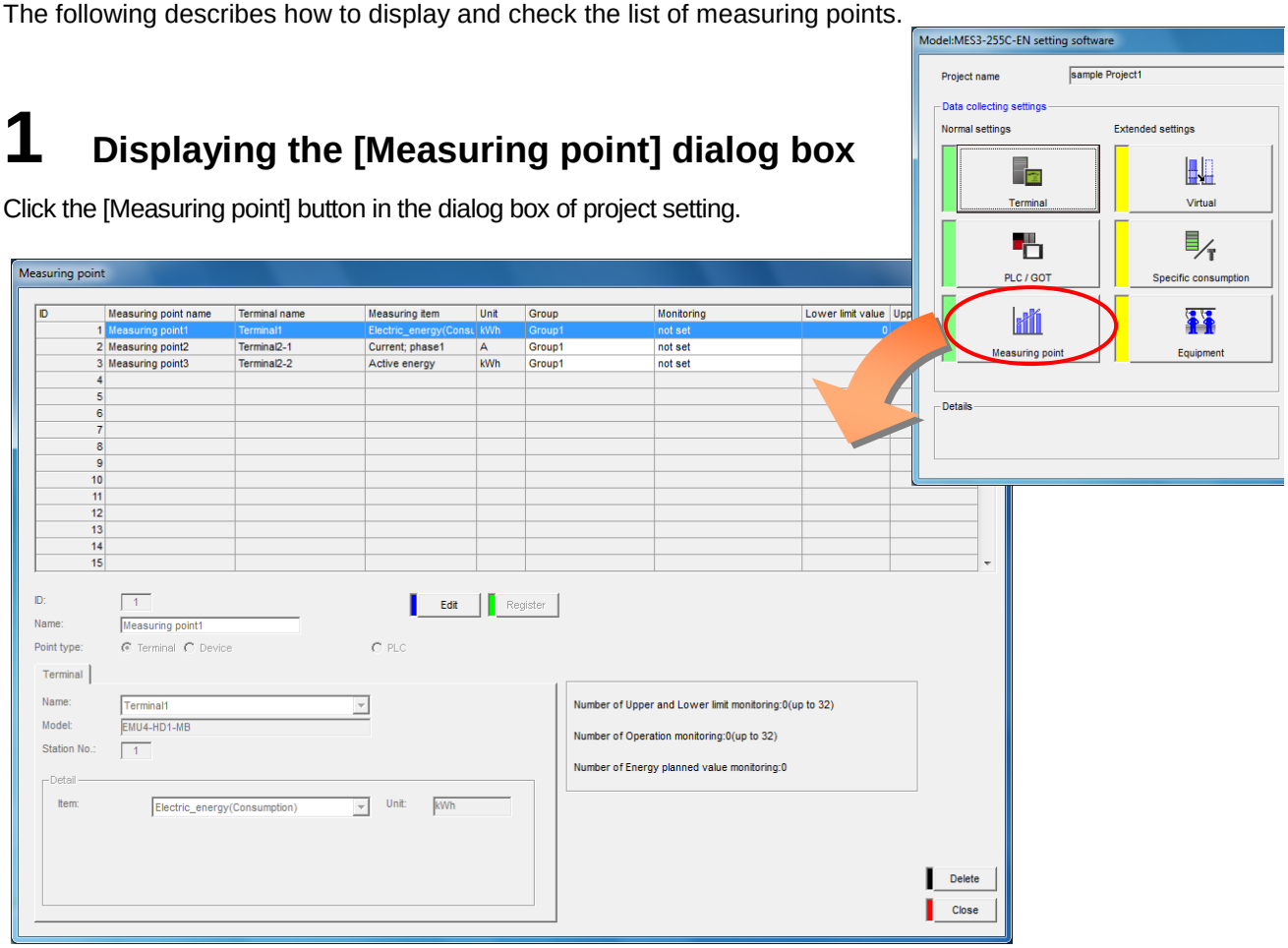
This section explains the procedure on the [Measuring point].
A measuring point refers to a data item from measuring terminal equipment or a device of PLC/GOT. A maximum of 255 points can be registered.

Checking a list of registered measuring points

The following describes how to display and check the list of measuring points.

1 Displaying the [Measuring point] dialog box

Click the [Measuring point] button in the dialog box of project setting.



2 Checking the registration information

Check the following information displayed in [Measuring point list].

[ID]	: Measuring point ID
[Measuring point name], [Measured item], [Unit]	: Registered measuring point, registered measuring item, unit
[Group]	: Measuring point group name
[Monitoring]	: Set monitoring type
[Lower limit value], [Upper limit value]	: Lower limit monitoring, upper limit monitoring setting value

Registering a new measuring point

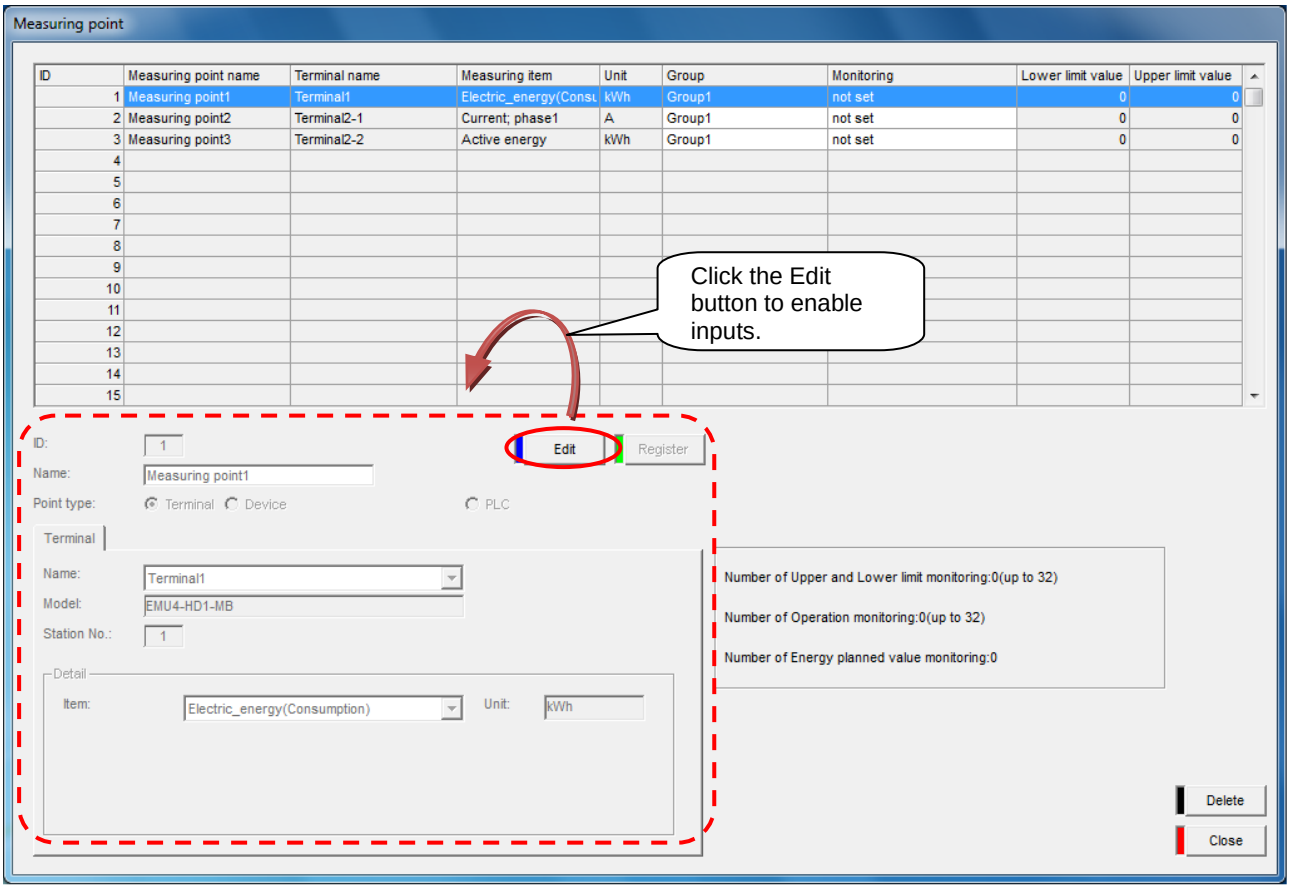
This section described how to register a new measuring point.

1 Displaying the [Measuring point] dialog box

Click the [Measuring point] button in the dialog box of project setting.

2 Selecting a line to register, and clicking the [Edit] button

Double-click a line to register in the measuring point list, or select a line to register and click the [Edit] button. The default value is displayed for each item in the measuring point information.



Remarks

- You can select and register any measuring point. (Also, you can create a free ID.)
- You cannot register a measuring point when no terminal is registered.

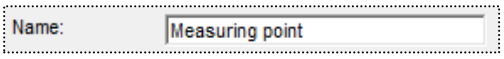
3 Selecting a type of a terminal

Select the terminal type with the [Point type] radio button.

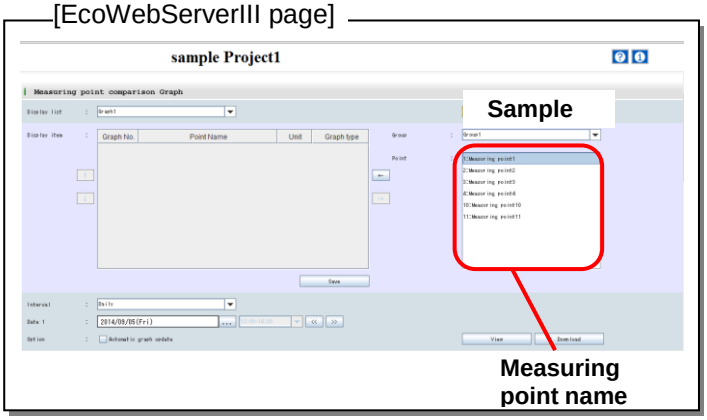
Type of terminal registered in measuring point	Selected radio button
Measuring equipment terminal	[Terminal]
PLC connected to Ethernet CH2 port	[Device]
(Only CC-Link communication products) CC-Link connection PLC registered with CC-Link terminal	[PLC]

4 Entering a measuring point name

Enter a name of a measuring point.
(This measuring point name is shown in the graphs or the list of measuring points on the EcoWebServerIII page)



[EcoWebServerIII page]



The entry conditions are as follow.

Characters	Up to 24 characters
Prohibited characters	The following characters cannot be registered: # ¥ / : , ; * ? “ < > |

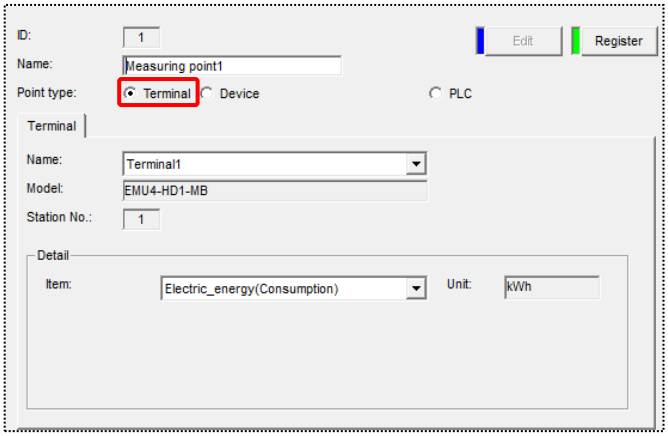
*1 If you use the characters in the list of the prohibited characters in Appendix, they may not be displayed correctly in the browser view of the EcoWebServerIII.

*2 A duplicate measuring point name can be registered.

5 - (1) Entering or selecting the items

For a measuring point of a terminal

Select the [Terminal] radio button, and enter or select the following items.



(1) [Name]

Select a terminal.

*1 The terminal name shown in the pull-down menu is the name registered in the [Terminal].

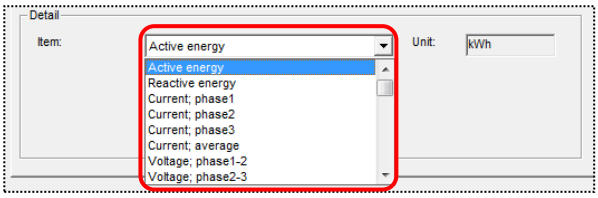
(2)-1 [Detail]

- [Item]

  Select a measured item from the pull-down menu.

  (The [Unit] is entered automatically.)

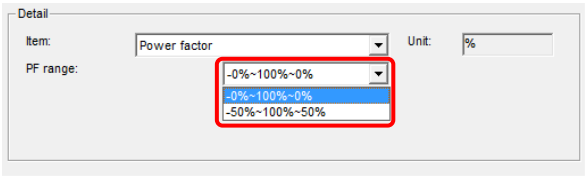
  * The measured item varies depending on the model.



- [PF range]

  When the power factor or the power factor demand is selected for the measured item, select a range of the power factor display.

  * The selection range varies depending on the model.



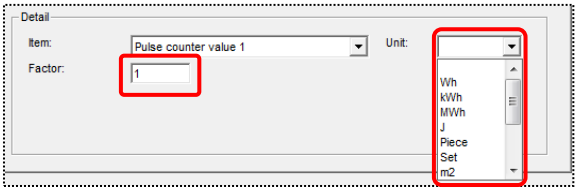
- [Factor]

  When a pulse counter value is selected for the measured item, enter a pulse multiplier.

  And select or type a unit.

  * The input range varies depending on the model.

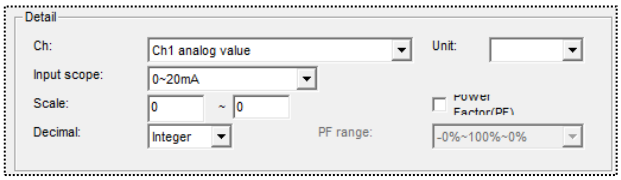
    (You can enter a unit up to 8 characters.)



2.-2 [Detail] (Analog (voltage/current) input type)

When an analog input type of a terminal (B-AX4A, etc.) is selected, select the following items.

* The setting item/range varies depending on the model.

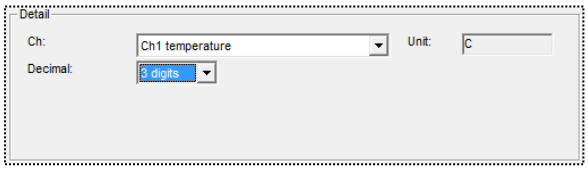


- **[Ch]** : Select a measured ch which data will be collected from.
- **[Unit]** : Select or type a unit. (You can enter a unit up to 8 characters.)
- **[Input scope]** : Select an input range. The input range should be the same setting as the terminal.
- **[Scale]** : Enter a scare range of an actual measurement value for the analog input.
  * This is disabled when the [PowerFactor(PF)] is selected.
- **[Decimal]** : Select the number of digits after the scale conversion.
- **[Power Factor (PF)]** :Select this check box to convert a scale of a power factor.
- **[PF range]** : Select a display range of a power factor. This is enabled only when the [PowerFactor(PF)] is selected.

2.-3 [Detail] (Analog (temperature) input type)

When a temperature input type of a terminal (B-TPU4, etc.) is selected, select the following items.

* The setting item/range varies depending on the model.

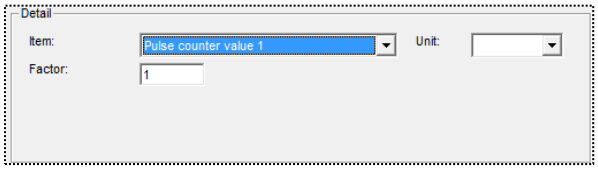


- **[Item]** : Select an item which data will be collected from.

2.-4 [Detail] (Pulse input type)

When a pulse input type of a terminal (B-AX4A, etc.) is selected, select the following items.

* The setting item/range varies depending on the model.

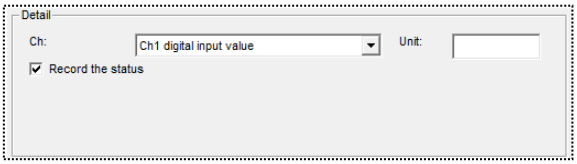


- **[Ch]** : Select a measured ch which data will be collected from.
- **[Factor]** : Enter a pulse multiplier.
- **[Unit]** : Select or type a unit. (You can enter a unit up to 8 characters.)

2.-5 [Detail] (Digital input type)

When a digital input type of a terminal (B-DX4A, etc.) is selected, select the following items.

* The setting item/range varies depending on the model.

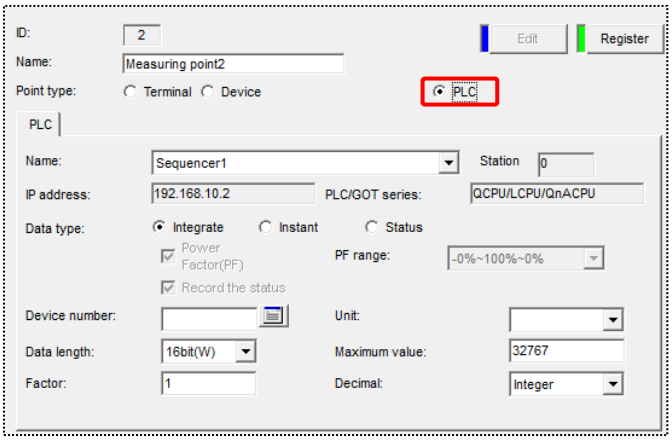


- **[Ch]** : Select a monitoring ch. Enter a pulse multiplier.
- **[Unit]** : Type a unit. (You can enter a unit up to 8 characters.)
  * This entry is optional.
- **[Record the status]** : Select this check box to save an operation history to a file.
  * Up to 32 operation histories can be recorded.

5 - (2) Entering or selecting the items

For a measuring point of a PLC (Ethernet connection)

Select the [PLC] radio button, and enter or select each of the following items.



(1) [Name]

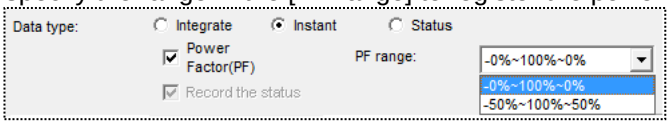
Select a PLC.

* The name shown in the pull-down menu is the terminal name of the PLC/GOT terminal name registered with [PLC/GOT].
The registered PLC/GOT information is displayed for station number, IP address and CPU series.

(2) [Data type]

Select a data type from [Integrate], [Instant], and [Status].

*1 When [Instant] is selected:
The [Power Factor (PF)] selection check box is enabled.
Select the check box and specify the range in the [PF range] to register the power factor.



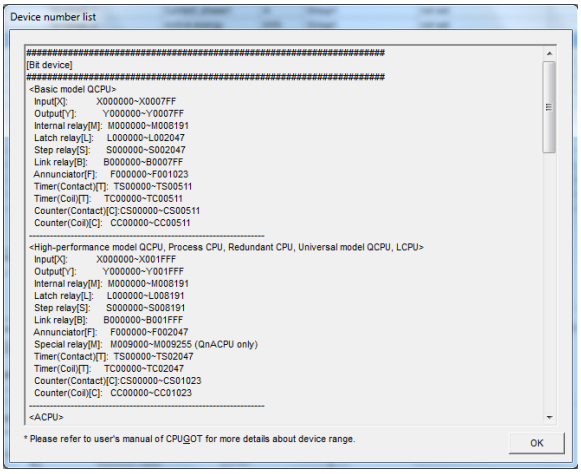
*2 When [Status] is selected:
The [Record the state] selection check box is enabled.
Select this check box to save an operation history to a file.
*** Up to 32 operation histories can be recorded.**

(3) [Device number]

Enter a device number with 7 characters in uppercase (including the device name).

* For the possible range, refer to "**5.7 List of measured items of devices**".

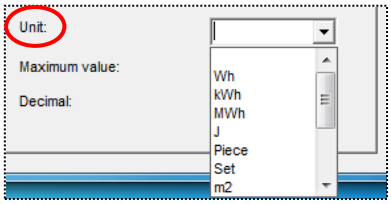
The setting range appears when the button in the input field is clicked.



* Characters not included in the setting range cannot be registered.

(4) [Unit]

Select or directly type a unit.
When you type it directory, the entry conditions are as follows.



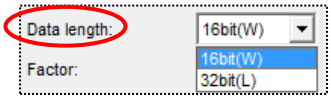
Characters	Up to 8 characters
Prohibited characters	The following characters cannot be registered. # ¥ : , ; * ? " < > |

*1 When [Status] is selected, the selection pull-down menu is disabled. (Only direct typing)

*2 When [Status] is selected, this entry is optional.

(5) [Data length]

Select a data length.
[Integrate] or [Instant]: Select from [16bit(W)] and [32bit(L)].
[Status]: Fixed to [1bit(B)]



(6) [Maximum value] (* only when [Integrate] selected)

Enter the max. value of the data range of the integrated count value.

(Ex.) When the data range is from 0 to 999999, the max. integrated count value is 999999.

* When the value exceeds the data range and returns to 0, the EcoWebServerIII performs one-cycle operation based on the max. integrated count value.

The input range is as follows. Enter the value in decimal.

Data length 16 bit (W)	1 to 32767
Data length 32 bit (L)	1 to 2147483647

(7) [Factor] (* only when [Integrate] or [Instant] selected)

Set a multiplier.

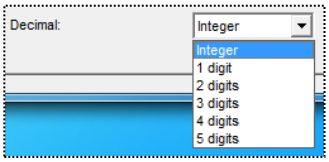
The input range is as follows. Enter the value in decimal.

Data length 16 bit (W)	0.00001 to 99999	(7 digits (including decimal point), up to 5 digits after the decimal point)
Data length 32 bit (L)	0.00001 to 1	(7 digits (including decimal point), up to 5 digits after the decimal point)

(8) [Decimal] (* only when [Integrate] or [Instant] selected)

Set the number of digits after the decimal point for displaying data.

Select from [Integer], [1 digit], [2 digits], [3 digits], [4 digits], and [5 digits].



* The possible range of digits after the decimal point is set by the setting of the data length and the multiplier.

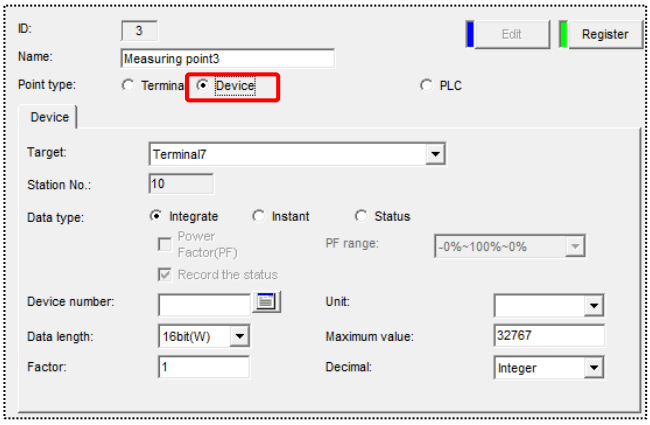
【Data length 16bit(W)】	
Factor	Possible digits after the decimal point
0.00001 to 1.00000	Integer, 1 to 5 digits
1.00001 to 10.0000	Integer, 1 to 4 digits
10.0001 to 100.000	Integer, 1 to 3 digits
100.001 to 1000.00	Integer, 1 or 2 digits
1000.01 to 10000.0	Integer, 1 digit
10000.1 to 99999.0	Integer

【Data length 32bit(L)】	
Factor	Possible digits after the decimal point
0.00001	Integer, 1 to 5 digits
0.00002 to 0.00010	Integer, 1 to 4 digits
0.00011 to 0.00100	Integer, 1 to 3 digits
0.00101 to 0.01000	Integer, 1 or 2 digits
0.01001 to 0.10000	Integer, 1 digit
0.10001 to 1	Integer

5 - (3) Entering or selecting the items

For a measuring point of a PLC (CC-Link communication)

Select the [Device] radio button, and enter or select each of the following items.



(1) [Target]

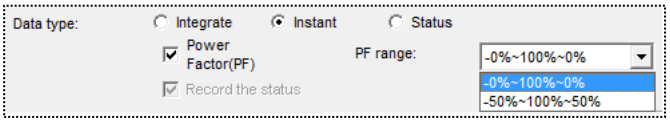
Select a terminal of the PLC(CC-Link communication).

* Targets in the pull-down menu are QJ61BT11N or LCPU/LJ61BT11 terminals registered in [Terminal].

(2) [Data type]

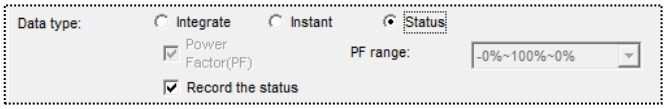
Select a data type from [Integrate], [Instant], and [Status].

*1 When [Instant] is selected:
The [Power Factor(PF)] selection check box is enabled.
Select the check box and specify the range in the [PF range] to register the power factor.



*2 When [Status] is selected:
The [Record the status] selection check box is enabled.
Select this check box to save an operation history to a file.

* Up to 32 operation histories can be recorded.

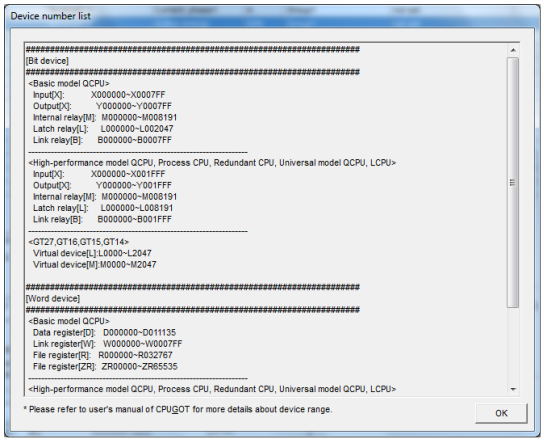


(3) [Device number]

Enter a device number with 7 characters in uppercase (including the device name).

* For the possible range, refer to "**5.7 List of measured items of devices**".

The setting range appears when the [ ] button in the input field is clicked.

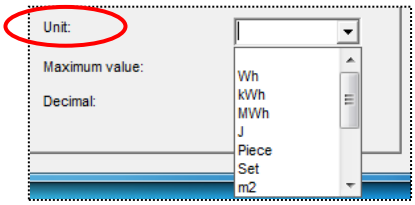


* Characters not included in the setting range cannot be registered.

(4) [Unit]

Select or directly type a unit.

When you type it directory, the entry conditions are as follows.

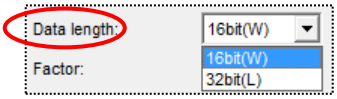


Characters	Up to 8 characters
Prohibited characters	The following characters cannot be registered. # ¥ : , ; * ? " < > |

*1 When **Operation monitoring** is selected, the selection pull-down menu is disabled. (Only direct typing)
*2 When **Operation monitoring** is selected, this entry is optional.

(5) [Data length]

Select a data length.
[Integrate] or [Instant]: Select from [16bit(W)] and [32bit(L)].
[Status]: Fixed to [1bit(B)]



(6) [Maximum value] (* only when [Integrate] selected)

Enter the max. value of the data range of the integrated count value.

(Ex.) When the data range is from 0 to 999999, the max. integrated count value is 999999.

* When the value exceeds the data range and returns to 0, the EcoWebServerIII performs one-cycle operation based on the max. integrated count value.

The input range is as follows. Enter the value in decimal.

Data length 16 bit (W)	1 to 32767
Data length 32 bit (L)	1 to 2147483647

(7) [Factor] (* only when [Integrate] or [Instant] selected)

Enter the max. value of the data range of the integrated count value.

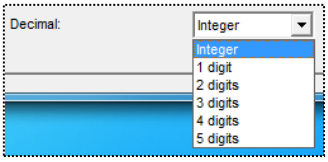
The input range is as follows. Enter the value in decimal.

Data length 16bit (W)	0.00001 to 99999 (7 digits (including decimal point), up to 5 digits after the decimal point)
Data length 32bit (L)	0.00001 to 1 (7 digits (including decimal point), up to 5 digits after the decimal point)

(8) [Decimal] (* only when [Integrate] or [Instant] selected)

Set the number of digits after the decimal point for displaying data.

Select from [Integer], [1 digit], [2 digits], [3 digits], [4 digits], and [5 digits].



* The possible range of digits after the decimal point is set by the setting of the data length and the multiplier.

[Data length 16 bit (W)]	
Factor	Possible digits after the decimal point
0.00001 to 1.00000	Integer, 1 to 5 digits
1.00001 to 10.0000	Integer, 1 to 4 digits
10.0001 to 100.000	Integer, 1 to 3 digits
100.001 to 1000.00	Integer, 1 or 2 digits
1000.01 to 10000.0	Integer, 1 digit
10000.1 to 99999.0	Integer

[Data length 32 bit (L)]	
Factor	Possible digits after the decimal point
0.00001	Integer, 1 to 5 digits
0.00002 to 0.00010	Integer, 1 to 4 digits
0.00011 to 0.00100	Integer, 1 to 3 digits
0.00101 to 0.01000	Integer, 1 or 2 digits
0.01001 to 0.10000	Integer, 1 digit
0.10001 to 1	Integer

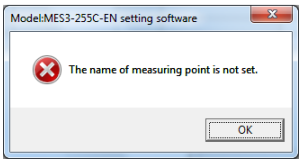
6 Registering

Click the button on the [Measuring point] dialog box to register a measuring point.

[Register] button : Register the measuring point information you set.
[Close] button : Back to the [Measuring point list] dialog box.

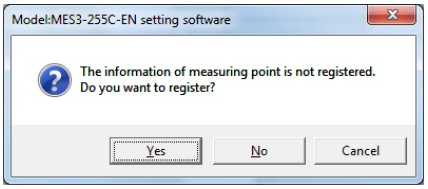
* If the setting is incorrect, the error massage such as the one on the right will appear according to the invalid setting when [Register] button is clicked. Correct the setting to satisfy the conditions.

(Example of display)



* If you click [Close] button without clicking the [Register] button after changing the entry, the message shown on the right will appear.
  [Yes] : Register
  [No] : Do not register.
  [Cancel] : Return to [Measuring point] screen

(Example of display)

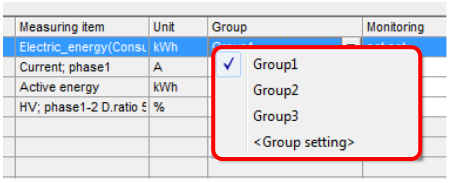


Setting the measuring point group

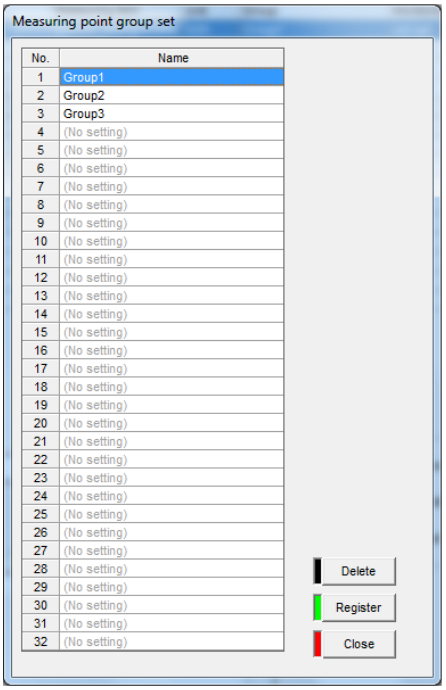
This section described how to set measuring point group.

1 Setting the measuring point group

Set the measuring point group.
Select the group to set for the measuring point from the [Group] selection pull-down menu.



* To newly register a group, select <Group setting>, and open the "Measuring point group setting screen".
(☞ Refer to 4.4.4 Measuring point group registration)



*2 The measuring point group is automatically registered when selected from the pull-down menu.

*3 When the measuring point is newly registered, it will be automatically registered in the [No.1] as the default.

Setting the monitor type and setting value

This section described the setting of the monitoring type and the setting value.

1 Setting the monitoring type and setting value

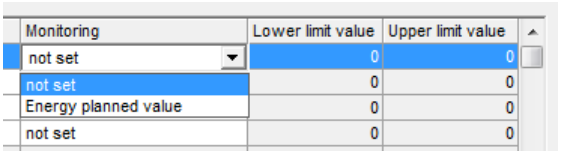
Set the monitoring type (Energy planned value, Upper limit, Lower limit, Upper or lower limit, Operation(ON), Operation(OFF), Operation(ON/OFF)), and the setting values (Lower limit value, Upper limit value).

*1 **The monitoring type and the setting value cannot changed during [measuring point] editing. Change it after pressing the [Resister] button.**

(1) [Monitoring]

Select no monitoring or the monitoring type from the [Monitoring] selection pull-down menu.

The following monitoring types are displayed in the pull-down menu according to the type of measuring item.



Type of measuring item	Monitoring type
Integrat (consumption, etc.)	not set, Energy planned value
Instant (current, voltage, etc.)	not set, Upper limit, Lower limit, Upper or lower limit
Status	Operation(ON), operation(OFF), operation(ON/OFF)
PLC	Data type: Integrate -> The same as the integrate Data type: Instant -> The same as the instant Data type: Status - > The same as the status

*1 **The setting is automatically registered when selected from the pull-down menu.**

(2) [Lower limit value], [Upper limit value]

Double-click the [Lower limit value] or [Upper limit value] field, and enter the values for the lower limit and upper limit.
The entry conditions are as follow.

Monitoring conditions	Active or inactive status			Input range
	Upper limit monitoring	Lower limit monitoring	Upper/lower limit monitoring	
Lower limit setting value		○	○	Up to 11 digits including decimal point and (-) sign; up to 5 decimal digits
Upper limit setting value	○		○	

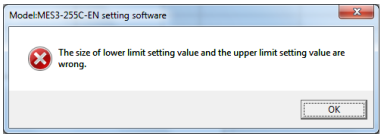
*1 **When monitoring, the values rounded by the number of decimal digits set for the measuring point are compared. Provide some margin to the monitoring values.**

*2 **When monitoring the upper and lower limits, make sure that [Lower limit setting value] < [Upper limit setting value] is satisfied.**

*3 **Input value is automatically registered when the Enter key is pressed.**

* If the settings are incorrect, a message as shown on the right appears when the Enter key is pressed. Change the setting to satisfy the condition for each item.

(Example of display)

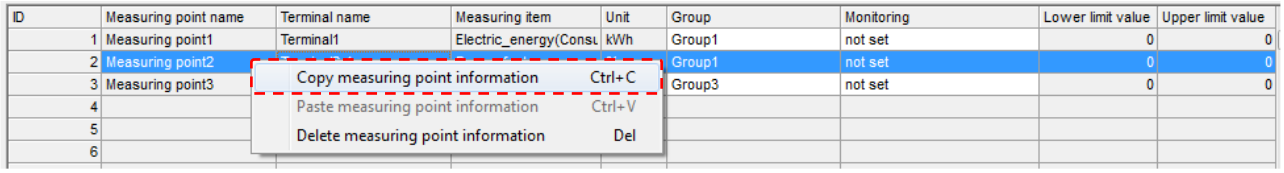


* Up to 32 points can be selected from the measuring points for upper/lower limit monitoring.
Up to 32 points can be set for the operation status monitoring.

Copy and paste the measuring point

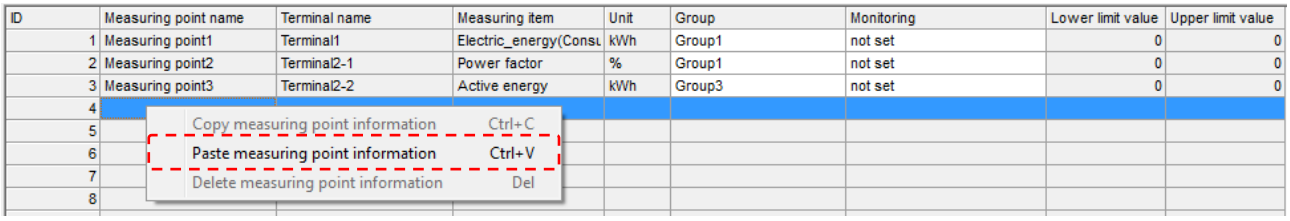
<Copying the measuring point information>

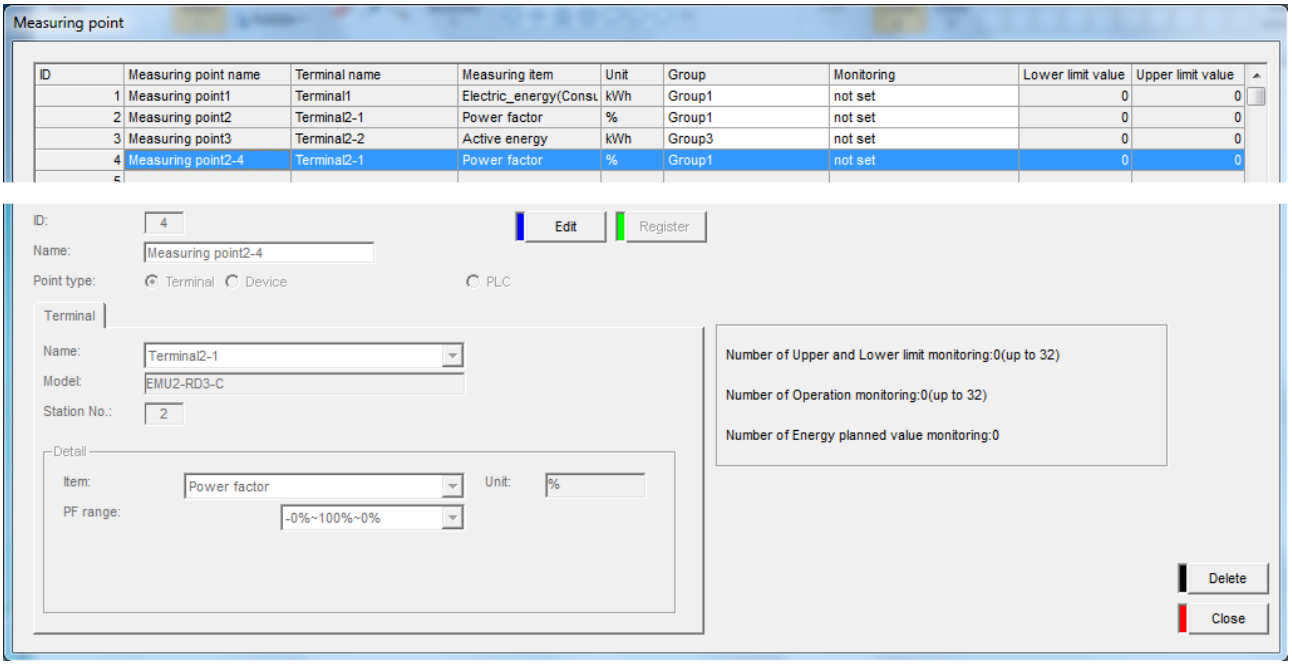
To copy registered measuring point information, select the line to copy and press the right-click menu [Copy measuring point information] or the short-cut keys Ctrl+C.


Copy measuring point information Ctrl+C
Paste measuring point information Ctrl+V
Delete measuring point information Del

<Pasting the measuring point information>

To paste the copied measuring point information, select the line to paste and press the right-click menu [Paste measuring point information] or the short-cut keys Ctrl+V.


Copy measuring point information Ctrl+C
Paste measuring point information Ctrl+V
Delete measuring point information Del



Remarks

- Multiple lines cannot be copied and pasted.
- Measuring point information cannot be pasted into a registered line.
- The “-”+ pasted line No. is automatically added to the end of the pasted measuring point name.
- The default value is set in the pasted address.
- The pasted measuring point information is automatically registered.

Delete a registered measuring point

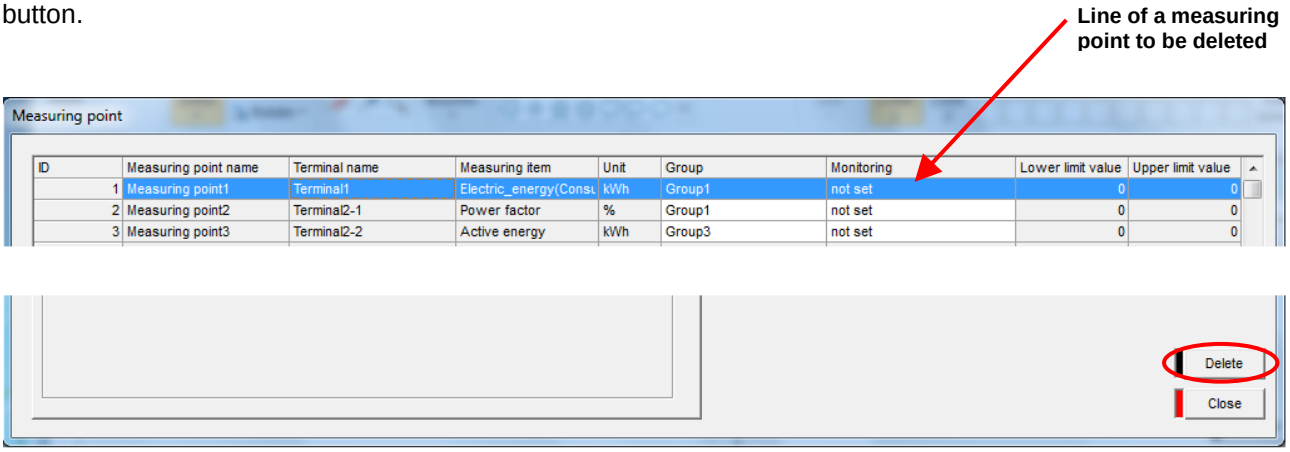
This section described how to delete a registered measuring point.

1 Displaying the [Measuring point] dialog box

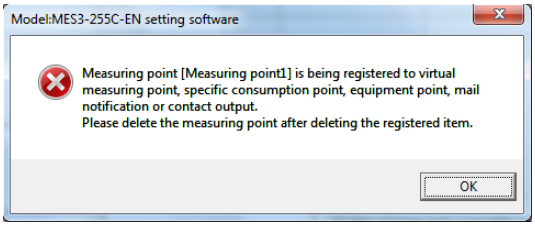
Click the [Measuring point] button in the dialog box of project setting.

2 Selecting a measuring point you want to delete, and clicking the [Delete] button

Select a line of a measuring point you want to delete in the measuring point list, and then click the [Delete] button.

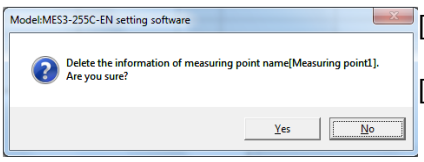

Line of a measuring point to be deleted
Measuring point
ID
Measuring point name
Terminal name
Measuring item
Unit
Group
Monitoring
Lower limit value
Upper limit value
1 Measuring point1 Terminal1 Electric_energy(Consu kWh Group1 not set 0 0
2 Measuring point2 Terminal2-1 Power factor % Group1 not set 0 0
3 Measuring point3 Terminal2-2 Active energy kWh Group3 not set 0 0
Delete
Close

*1 If the terminal you select is registered as any of a virtual measuring point, a Specific consumption measuring point, equipment, or a monitoring notification, the message shown on the right will be displayed. Click the [OK] button to delete the registered item first.


Model:MES3-255C-EN setting software
Measuring point [Measuring point1] is being registered to virtual measuring point, specific consumption point, equipment point, mail notification or contact output.
Please delete the measuring point after deleting the registered item.
OK

3 Deleting

A delete confirmation message appears. Click the button to delete.



[Yes] button : Delete the measuring point, and back to the [Measuring point registration] dialog box.
[No] button : Cancel the deletion, and back to the [Measuring point registration] dialog box.

After the measuring point is deleted, its registration information is removed from the list in the [Measuring point] list.

Remarks

- The measuring point information can also be deleted by clicking the right-click menu [Delete measuring point information] or by pressing the [Delete] key.

Editing registration information of a registered measuring point

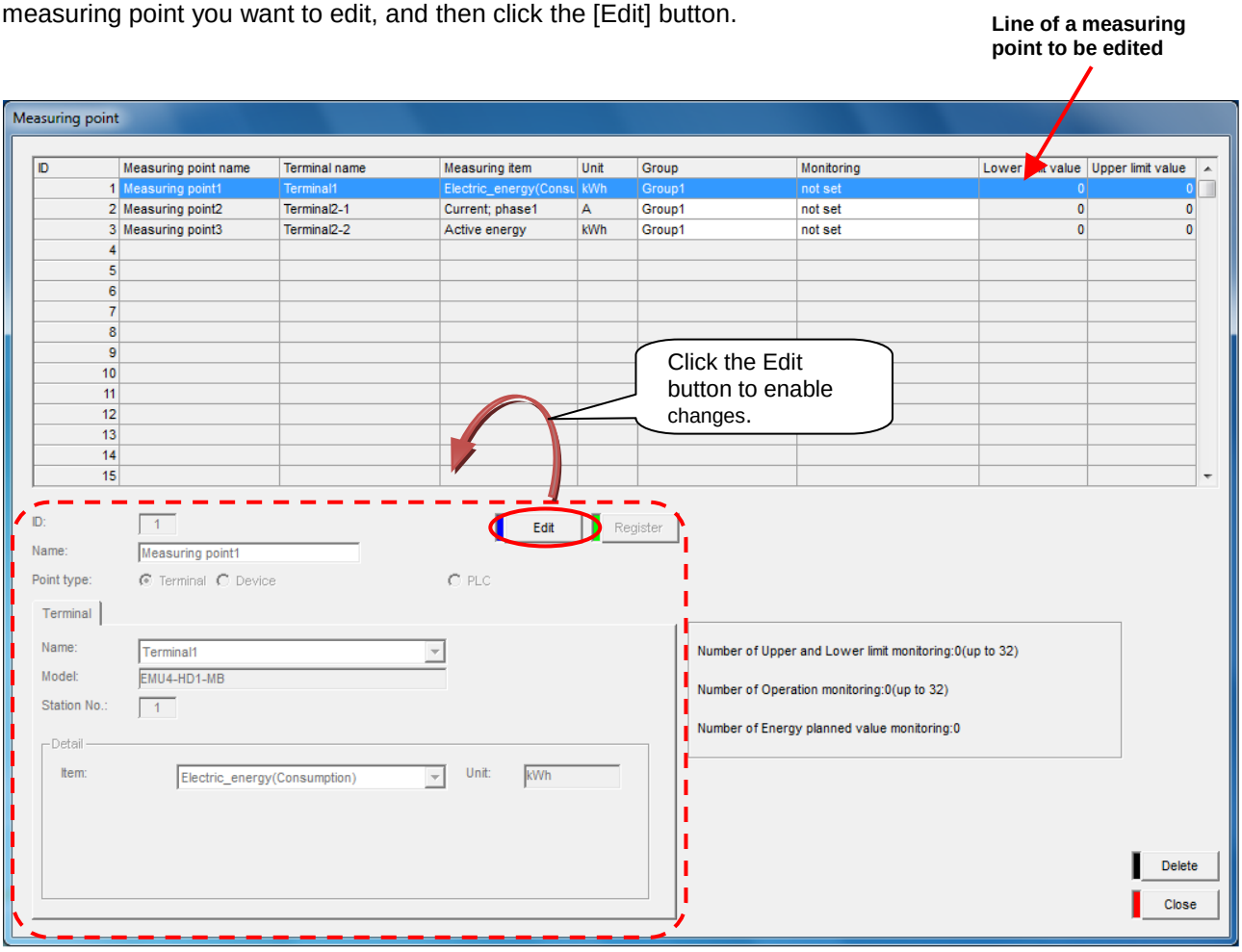
This section described how to edit registration information of a measuring point.

1 Displaying the [Measuring point] dialog box

Click the [Measuring point] button in the dialog box of project setting.

2 Selecting a measuring point you want to edit, and click the [Edit] button

Double-click a line of a measuring point you want to edit in the measuring point list or select a line of a measuring point you want to edit, and then click the [Edit] button.



3 Editing the items to be changed and registering them

Click the [Register] button after editing items you want to change.

* The entries and conditions for each item are similar to those at registering a new measuring point.

Remarks

- **You cannot edit the items other than the [Name] if it is registered as a virtual measuring point, a Specific consumption measuring point, equipment, or a monitoring notification.**

4.4.4. Measuring point group registration

This section explains the procedure on the for [Measuring point group set].
A measuring point group refers to a group of several measuring points. It is listed in the current value view (group) of the EcoWebServerIII for each measuring point group registered here.
A maximum of 32 groups can be registered.

Remarks

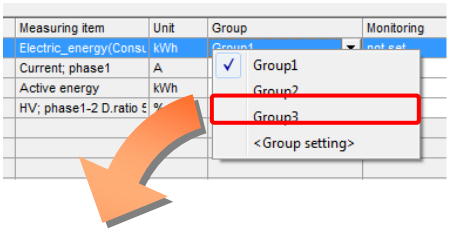
- You cannot register one measuring point to more than one measuring point group at the same time.
- You cannot register a virtual measuring point to a measuring point group.

Checking a list of registered measuring point groups

The following describes how to display and check the list of registered measuring point groups.

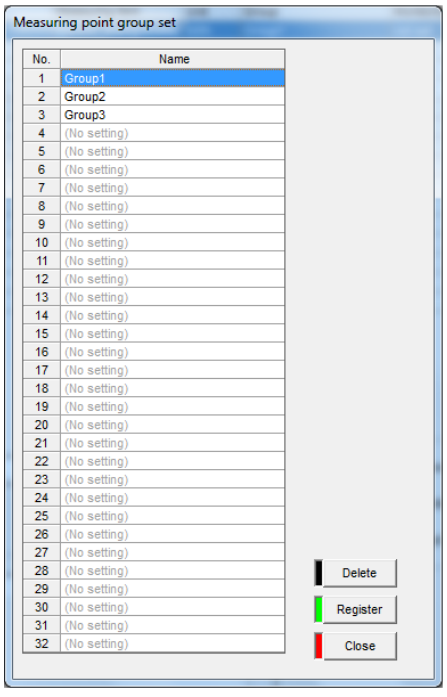
1 Displaying the [Measuring point] dialog box

Click the [Measuring point] button in the dialog box of project setting.



2 Displaying the [Measuring point group set] dialog box

Select an any measuring point on the measuring point registration screen, and select <Group setting> from the [Group] selection pull-down menu.



3 Checking the registration information

Check the following information displayed in the screen.

[No.] : Measuring point group No.
[Name] : Name of registered measuring point group

Registration a new measuring point group

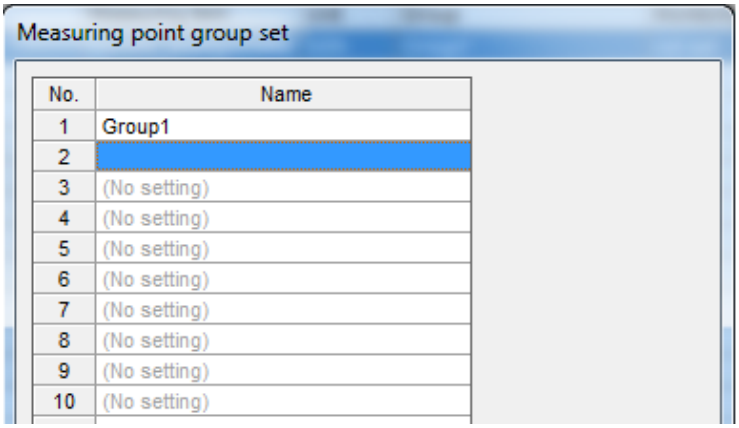
This section described how to a new measuring point group.

1 Displaying the [Measuring point] dialog box

Click the [Measuring point registration] button in the dialog box of project setting.

2 Displaying the [Measuring point group set] dialog box

Select an any measuring point on the measuring point registration dialog box, and select <Group setting> from the [Group] selection pull-down menu.



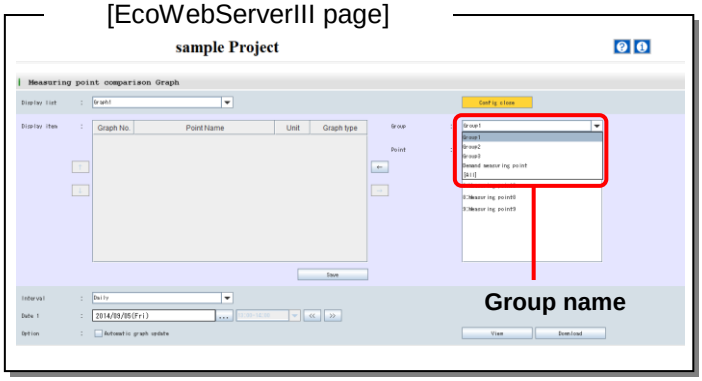
Remarks

- "Group 1" is set in Group No. 1 as the default.

3 Entering the measuring point group name

Double-click a cell with no name set, and enter the measuring point group name.
(This group name is shown in the graphs or the list of measuring points, etc., on the EcoWebServerIII page.)

[EcoWebServerIII page]



The entry conditions are as follows.

Characters	Up to 24 characters
Prohibited characters	The following characters cannot be registered: # ¥ / : , ; * ? “ < > |

[*1] If you use the characters in the list of prohibited characters in Appendix, they may not be displayed correctly in the browser view of EcoWebServerIII.

[*2] A duplicate measuring point group name cannot be registered.

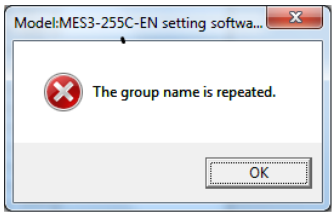
4 Registering

Click the button on the [Measuring point group set] dialog box to register.

[Register] button : Register the measuring point group with information you set.
[Close] button : Back to the [Measuring point] dialog box.

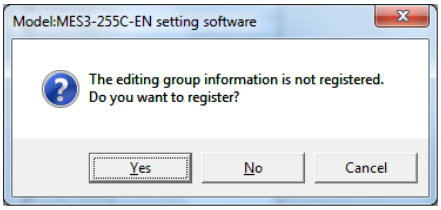
*1 If the setting is incorrect, the error message such as the one on the right will appear according to the invalid setting when [Register] button is clicked. Correct the setting to satisfy the conditions.

(Example of display)



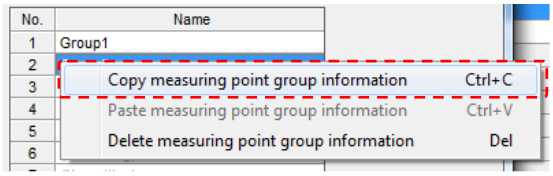
*2 If you click [Close] button without clicking the [Register] button after changing the entry, the message shown on the right will appear.

[Yes] button : Register
[No] button : Not register.
[Cancel] button : Back to the [Measuring point group set] dialog box



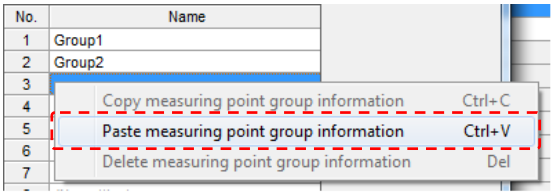
<Copying measuring point group information>

To copy registered measuring point group information, select the line to copy and press the right-click menu [Copy measuring point group information] or the short-cut keys Ctrl+C.



<Pasting measuring point group information>

To paste the copied measuring point group information, select the line to paste and press the right-click menu [Paste measuring point group information] or the short-cut keys Ctrl+V.



Remarks

- Multiple lines cannot be copied and pasted.
- Measuring point group information cannot be pasted into a registered line.

Deleting a registered measuring point group

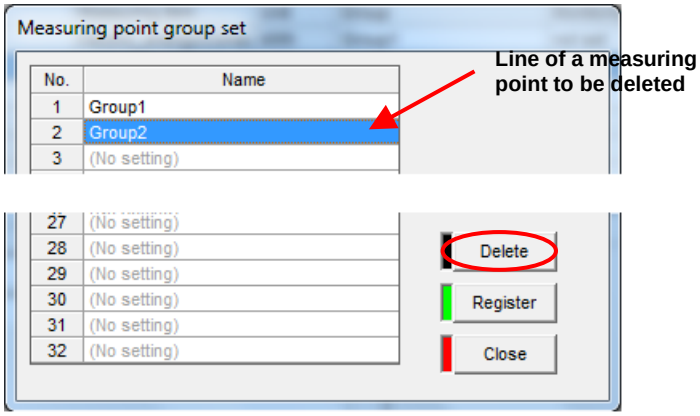
This section described how to delete a registered measuring point group.

1 Displaying the [Measuring point group set] dialog box

Select any measuring point on the measuring point registration screen, and select <Group setting> from the [Group] selection pull-down menu.

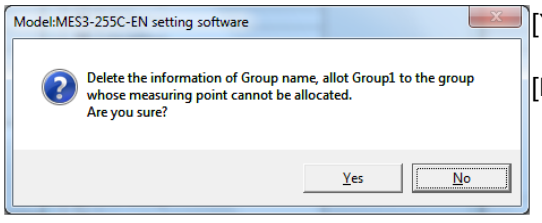
2 Selecting the measuring point group you want to delete, and clicking the [Delete] button

Select a line of the measuring point group you want to delete in the list in the [Measuring point group set] dialog box, and then click the [Delete] button.



3 Deleting

A delete confirmation message appears. Click the button to delete.


Model:MES3-255C-EN setting software
Delete the information of Group name, allot Group1 to the group whose measuring point cannot be allocated.
Are you sure?
Yes
No

[Yes] button : Delete the measuring point group and back to the [Measuring point group set] dialog box.
[No] button : Cancel the deletion and back to the [Measuring point group set] dialog box.

After the measuring point group is deleted, its registration information is removed from the list in the [Group] list.
* **The measuring point that is registered in the deleted group is assigned to the measuring point group 1.**

Remarks

- The measuring point group can also be deleted by clicking the right-click menu [Delete measuring point group information] or pressing the [Delete] key.
- Measuring point group No. 1 cannot be deleted

Editing the registration information of a registered measuring point group

This section described how to registration information of a measuring point group.

1 Displaying the [Measuring point] dialog box

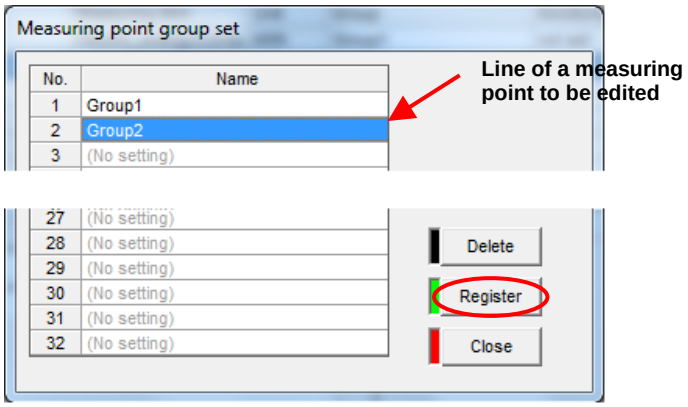
Click the [Measuring point] button in the dialog box of project setting.

2 Displaying the [Measuring point group set] dialog box

Select any measuring point on the measuring point registration dialog box, and select <Group setting> from the [Group] selection pull-down menu.

3 Editing the name of the group you want to change

Double-click the name of the measuring point group to be changed in the list on the [Measuring point group set] dialog box, and change the name.



4 Registering

Click the [Register] button after editing items you want to change.

* The entries and conditions for each item are similar to those at registering a new group.

4.5. Measuring data collection setting [Advanced settings]

This section explains setting items that make it easier to use this product: "Virtual measuring point registration", "Specific consumption measuring point registration" and "Equipment registration".

4.5.1. Virtual measuring point registration

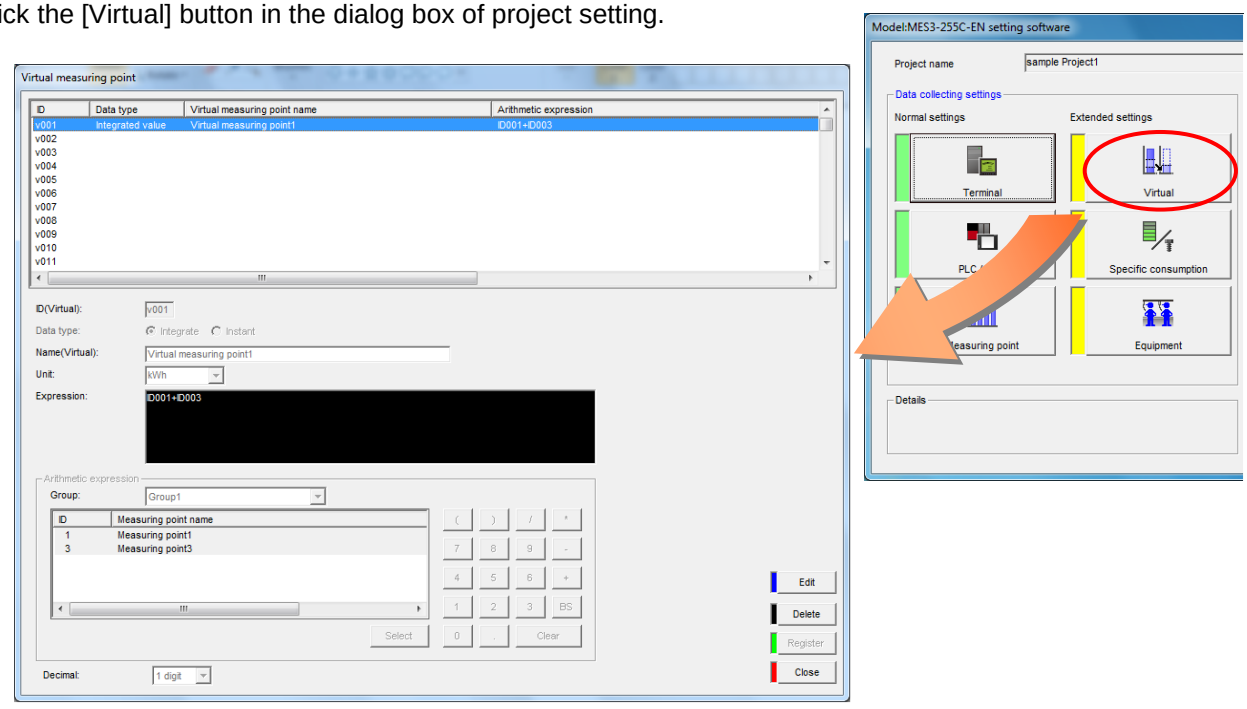
This section explains the procedure on the [Virtual measuring point registration].
A virtual measuring point refers to a measuring point for which the computation result between measuring points is used as virtual measurement data. A **maximum of 128** measuring points (excluding the 255 measuring points) can be registered.

Checking the list of registered virtual measuring points

The following describes how to display and check the list of virtual measuring points.

1 Displaying the [Virtual measuring point] dialog box

Click the [Virtual] button in the dialog box of project setting.



2 Checking the registration information

Check the following information displayed on the [Virtual measuring point] list.

[ID]	: Virtual measuring point ID
[Data type]	Data type of a registered virtual measuring point (integrated value, momentary value)
[Virtual measuring point name]	Name of a registered virtual measuring point
[Arithmetic expression]	Registered arithmetic expression
[Unit]	: Registered unit
[Decimal]	: Registered number of digits after the decimal point

Registering a new virtual measuring point

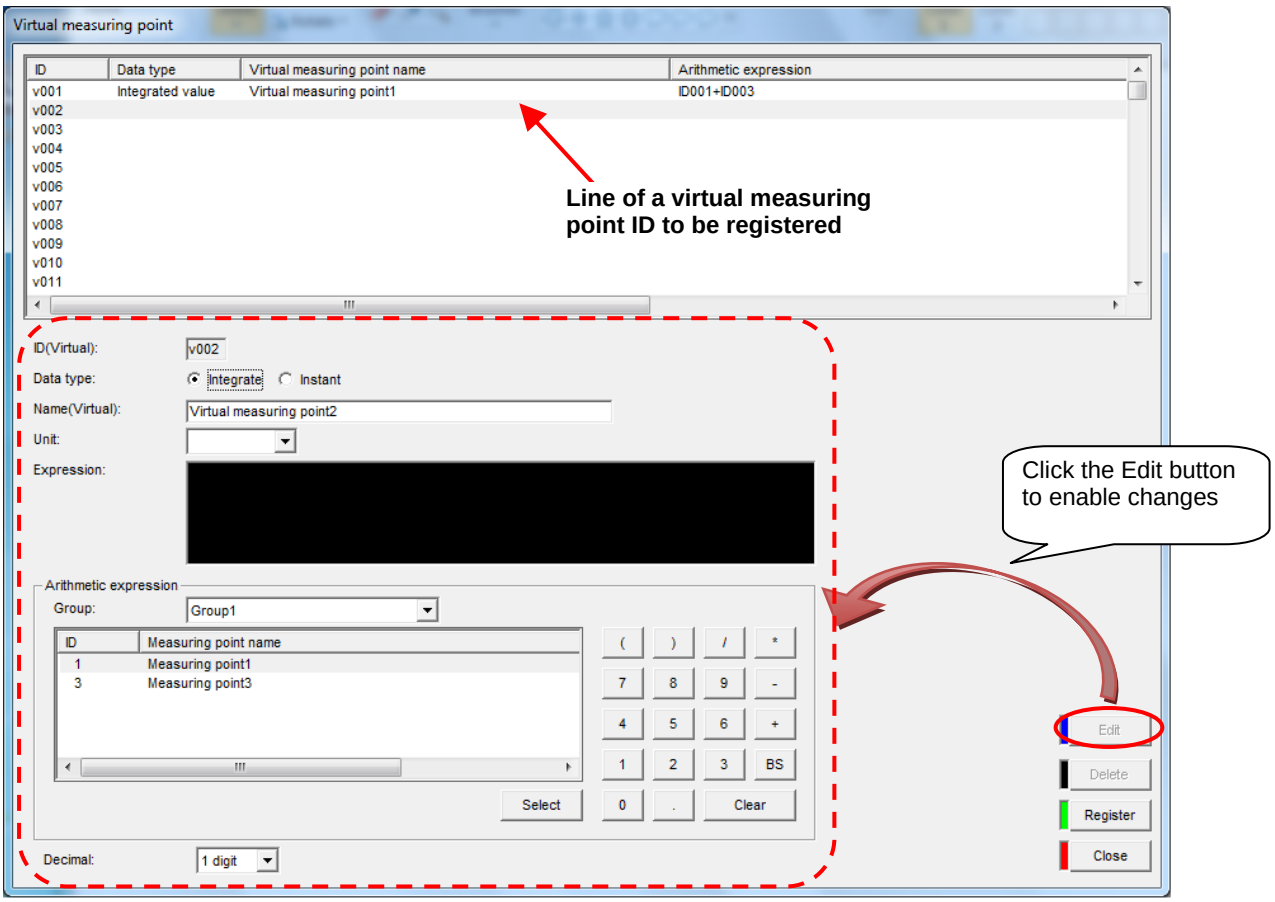
This section described how to register a new virtual measuring point.

1 Displaying the [Virtual measuring point] dialog box

Click the [Virtual measuring point registration] button in the dialog box of project setting.

2 Selecting the line to register, and clicking the [Edit] button

Double-click the line to register on the [Virtual measuring point] list, or select the line to register and click the [Edit] button.



Remarks

- You can select and register any virtual measuring point. (Also, you can create a free ID.)

3 Entering or selecting the items

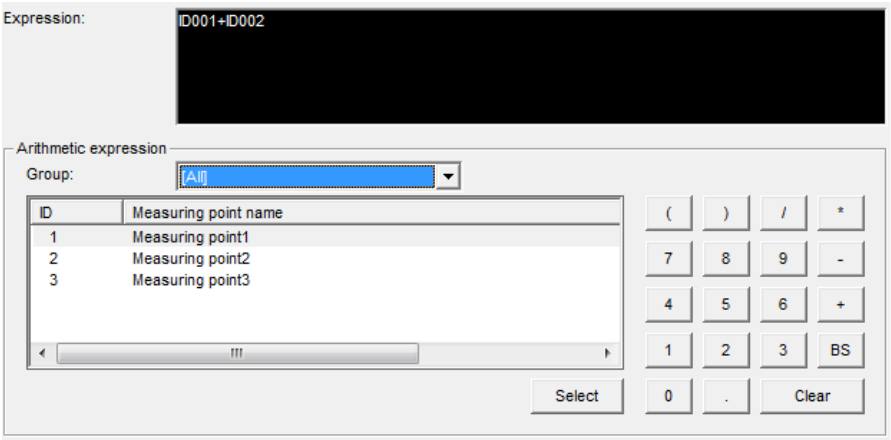
Enter or select the following items.

<table>
<tr><td>[Data type]</td><td>Select either of an [Integrate] or a [Instant].

* When the [Integrate] is selected here, only an [Integrate] can be specified as a measuring point in an arithmetic expression. When the [Instant] is selected, only a [Instant] can be specified.</td></tr>
<tr><td rowspan="4">[Name(Virtual)]</td><td colspan="2">Enter a name of a virtual measuring point. (This virtual measuring point name is shown in the graphs or the list of measuring points on the EcoWebServerIII page)</td></tr>
<tr><td>Characters</td><td>Up to 24 characters</td></tr>
<tr><td>Prohibited characters</td><td>The following characters cannot be registered:
¥ / : , ; * ? “ < > |</td></tr>
<tr><td colspan="2">*1 If you use any disallowed characters, which are listed in “Appendix: Disallowed Character List,” the characters may not be displayed properly in the browser display of EcoWebServerIII.。
*2 A duplicate name of a virtual measuring point cannot be registered.</td></tr>
<tr><td rowspan="4">[Unit]</td><td colspan="2">Select or directly type a unit.
When you type it directory, the entry conditions are as follows.</td></tr>
<tr><td>Characters</td><td>Up to 8 characters</td></tr>
<tr><td>Prohibited characters</td><td>The following characters cannot be registered:
¥ : , ; * ? “ < > |</td></tr>
<tr><td colspan="2">* Units that can be selected from the pull-down menu vary depending on the [Data type].</td></tr>
<tr><td>[Decimal]</td><td colspan="2">Select a number of digits after the decimal point.
A computation result is rounded at the number of digits specified here.
(Ex.) "1 digit" is selected -> a computation result is truncated a number to 1 decimal place</td></tr>
</table>

4 Entering an arithmetic expression

Enter an arithmetic expression of a virtual measuring point.
To enter a numeric value and operator, use buttons on the dialog box.
You cannot enter input them by a keyboard



The conditions of the expression you can enter are as follows.

Arithmetic element	Up to 16 elements, including measuring points and constants
Characters in an arithmetic expression	Up to 256 characters
Numerical input range	11 digits including decimal point, up to 5 digits after the decimal point

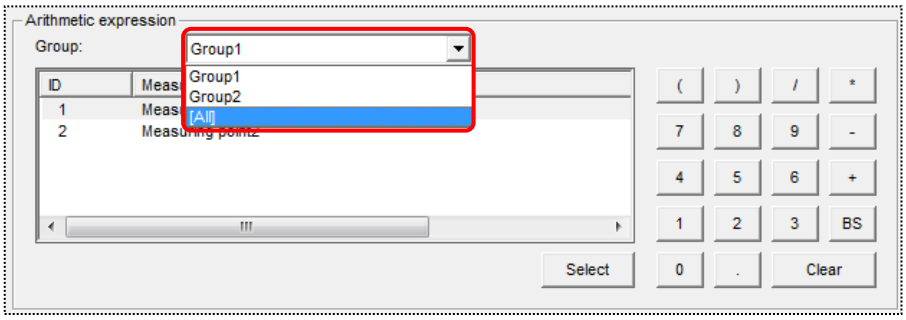
Expression not allowed	• Value exceeds 11 digits	…Ex. :	123456789012
	• Consecutive operators	…Ex. :	*/
	• Sign after operator	…Ex. :	*-4.2
	• Right bracket after value	…Ex. :	123(
	• Value after right bracket	…Ex. :	)123
	• Left bracket after right one	…Ex. :	)(
	• Right bracket after left one	…Ex. :	()
	• Operator after left bracket	…Ex. :	(*
	• Right bracket after operator	…Ex. :	0+
	• Operator after 0	…Ex. :	0.000001
	• More than 6 decimal places	…Ex. :	0123
	• Integer started with 0	…Ex. :	.00001
	• Start with a decimal point	…Ex. :	)
	• Start with a right bracket	…Ex. :	*
	• Start with an operator	…Ex. :	-
	• Start with a sign		

*1 You can specify it with a constant only.
This is used to specify a constant to a production amount in the Specific consumption measuring point registration, and a load time, a downtime, the number of processed products and the number of non-defective products in the Equipment registration. In this case, set an integrated value for the data type.

*2 After an expression is entered, the [Data type] is disabled and you cannot change the data type.
After all expressions are cleared, the [Data type] is enabled and you can change the data type.

<To select a measuring point as an element of an arithmetic expression>

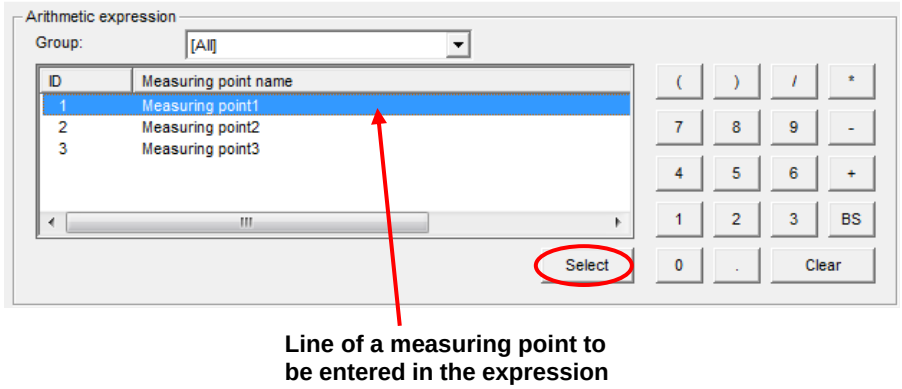
(1) Select [Group]



(2) Measuring points included in the group selected in (1) is displayed in the list. Double-click a line of a measuring point name you want to enter an arithmetic expression,

Or

Select a line of a measuring point you want to enter, and then click the [Select] button.



(3) The ID number of the measuring point selected is entered in the [Expression]. (ID number is 3 digits or 4 digits)

*1 The "demand measuring point" groups are displayed only on the EcoWebServerIII with demand control function.

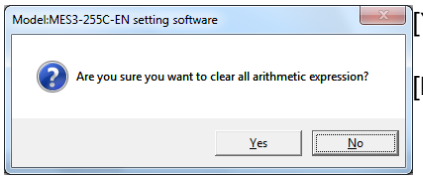
*2 If [Integrate] is selected for [Data type], the following measuring points appear as the "demand measuring point" group.

1001 Integrated value of Consumption (Whole day)
1032 Integrated value of Consumption (Time zone 1)
1033 Integrated value of Consumption (Time zone 2)
1034 Integrated value of Consumption (Time zone 3)
1035 Integrated value of Consumption (Time zone 4)
1036 Integrated value of Consumption (Time zone 5)
1037 Integrated value of Consumption (Time zone 6)
1038 Integrated value of Consumption (Time zone 7)
1039 Integrated value of Consumption (Time zone 8)
1040 Integrated value of Consumption (Time zone 9)
1041 Integrated value of Consumption (Time zone 10)

The integrated value of consumption (Time zone 1) to integrated value of consumption (Time zone 10) are displayed only when [Carry out management based on calendar setting] is checked.)

<To delete an expression>

- If you want to delete one expression, click the [BS] button.
- If you want to clear all expressions, click the [BS] button.
  After you clicked the [Clear] button, the following message will appear.



[Yes] button : Clear all expressions and back to the [Virtual measuring point] dialog box.
[No] button : Cancel clearing and back to the [Virtual measuring point] dialog box.

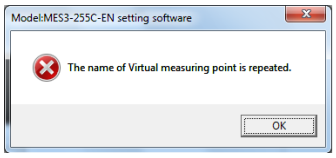
5 Registering

Click the button on the [Virtual measuring point] dialog box to register.

[Register] button : Register the virtual measuring point information you set.
[Close] button : Back to the project setting dialog box.

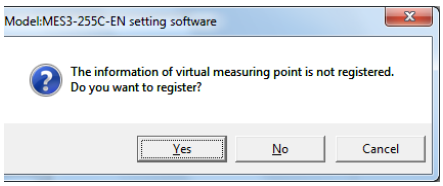
* If the set details are not proper, an error message as shown on the right is displayed when clicking the [Register] button according to the error details. Reset the details so as to meet the conditions of each item.

(Example of display)



*2 After modification of entry details of each item, click the [Close] button instead of clicking the [Register] button, the message shown on the right is displayed.

[Yes] button : To register
[No] button : Not to register
[Cancel] button : Back to the [Vertual measuring point] dialog box.

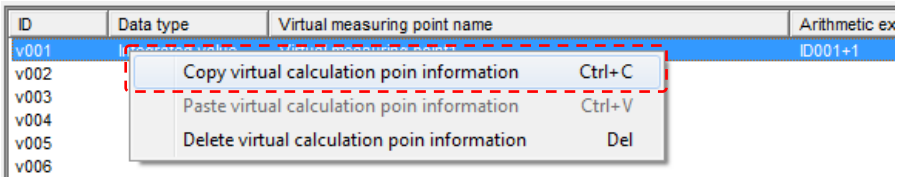


*3 When the entries of the expression are incorrect, the following error message will appear. Click the [OK] button, and then enter a correct expression.

Error message	Example of bad entry	Countermeasures
Algorithm errors. [The value (measuring point or constant) is 1 piece in parenthases]	(ID001), (1.23), etc.	Remove unnecessary brackets.
Algorithm errors. [The arithmetic result of the constant is "0"]	(10-10), (5-3-2), etc.	You cannot register the constant that a computation between constants results in 0.
Algorithm errors. [The arithmetic result of the constant exceeds 11 digits]	(999999*999999), etc.	You cannot register an expression such as that computation between constants results in more than 11 digits.
Algorithm errors. [The formula is wrong]	((ID0001+ID002), ID0001+, etc.	Check if the expression is valid.
Algorithm errors. [The number of characters of arithmetic expressions exceeds 256 characters]	((((((((((((((((((1000000000+ ID001)+(ID002*1.2)..., etc.	You cannot register an expression exceeding 256 characters.
Algorithm errors. [Divide by zero]	100/0, etc.	You cannot register an expression including a division by zero.

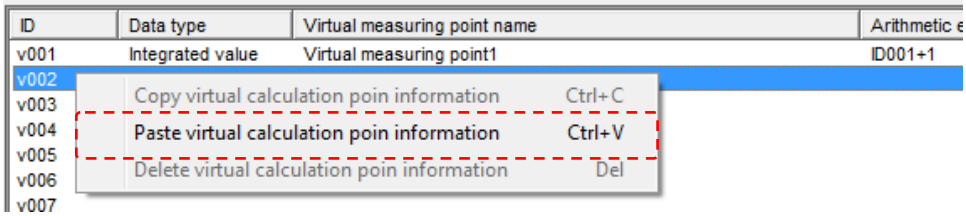
<Copying virtual measuring point information>

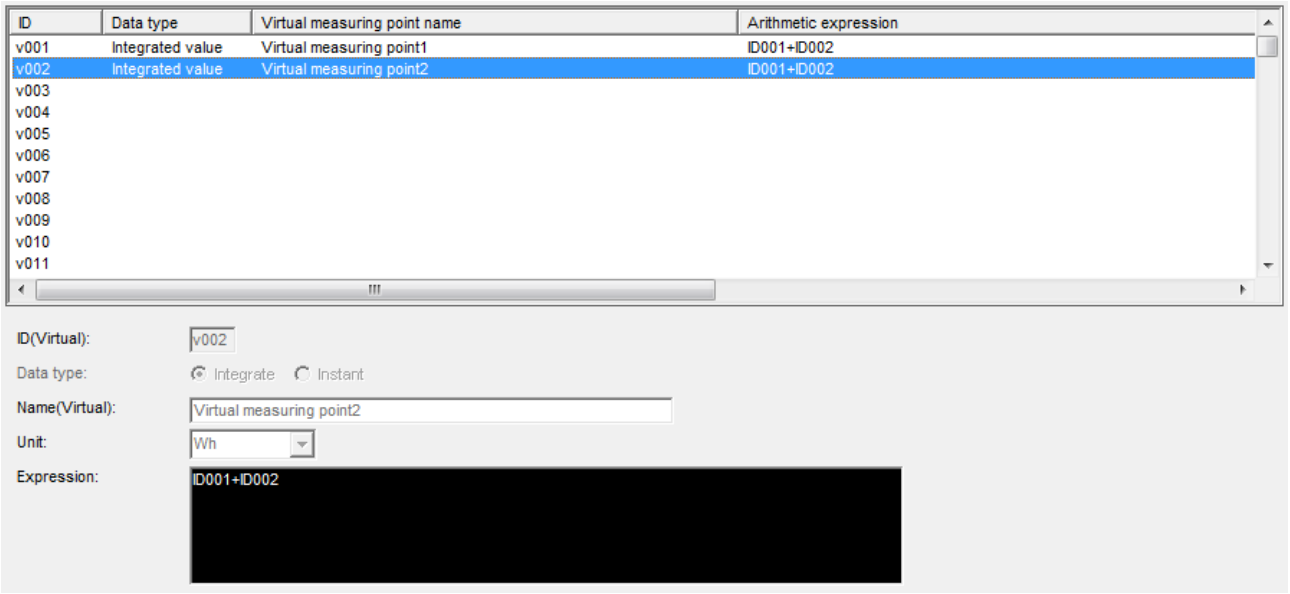
To copy registered virtual measuring point information, select the line to copy and press the right-click menu [Copy virtual calculation point information] or the short-cut keys Ctrl+C.



<Pasting virtual measuring point information>

To paste the copied virtual measuring point information, select the line to paste and press the right-click menu [Paste virtual calculation point information] or the short-cut keys Ctrl+V.





Remarks

- Multiple lines cannot be copied and pasted.
- Virtual measuring point information cannot be pasted into a registered line.
- The "-"+ pasted line No. is automatically added to the end of the pasted virtual measuring point name.
- The pasted virtual measuring point information is automatically registered.

Deleting a registered virtual measuring point

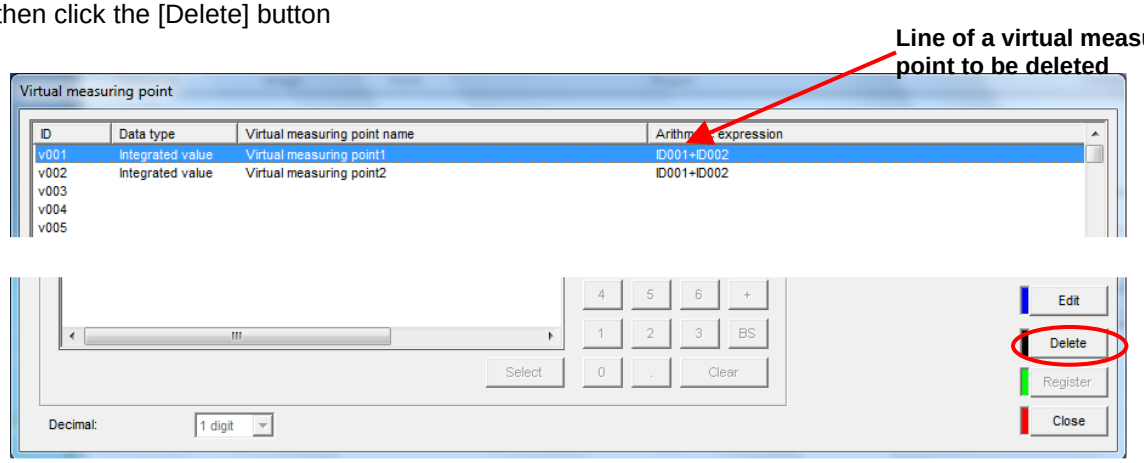
This section described how to delete a registered virtual measuring point.

1 Displaying the [Virtual measuring point] dialog box

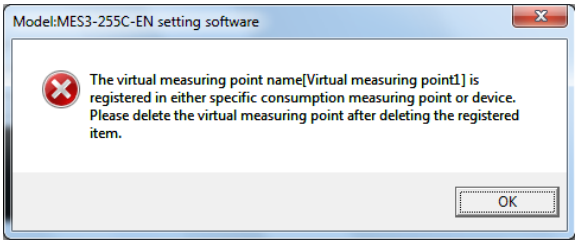
Click the [Virtual] button in the dialog box of project setting.

2 Selecting a virtual measuring point you want to delete, and clicking the [Delete] button

Select a line of a measuring point you want to delete in the list in the [Virtual measuring point] list dialog box, and then click the [Delete] button

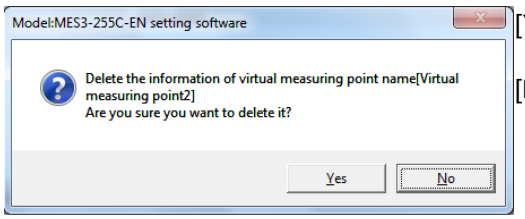


* If the virtual measuring point you select is registered as a specific consumption measuring point, the message on the right will appear.
Click the [OK] button to delete the registered item first.


Model:MES3-255C-EN setting software
The virtual measuring point name[Virtual measuring point1] is registered in either specific consumption measuring point or device.
Please delete the virtual measuring point after deleting the registered item.
OK

3 Deleting

The message confirming deletion is displayed. Click the button to execute deletion.


Model:MES3-255C-EN setting software
Delete the information of virtual measuring point name[Virtual measuring point2]
Are you sure you want to delete it?
Yes
No

[Yes] button : Delete the virtual measuring point and back to the [Virtual measuring point] dialog box.
[No] button : Cancel the deletion and back to the [Virtual measuring point] dialog box.

After the virtual measuring point is deleted, its registration information is removed from the list in the [Virtual measuring point] list.

Remarks

- You can delete it by clicking the right-click menu [Delete virtual calculation point information], or by pressing the [Delete] key.

Editing the registered information of a registered virtual measuring point

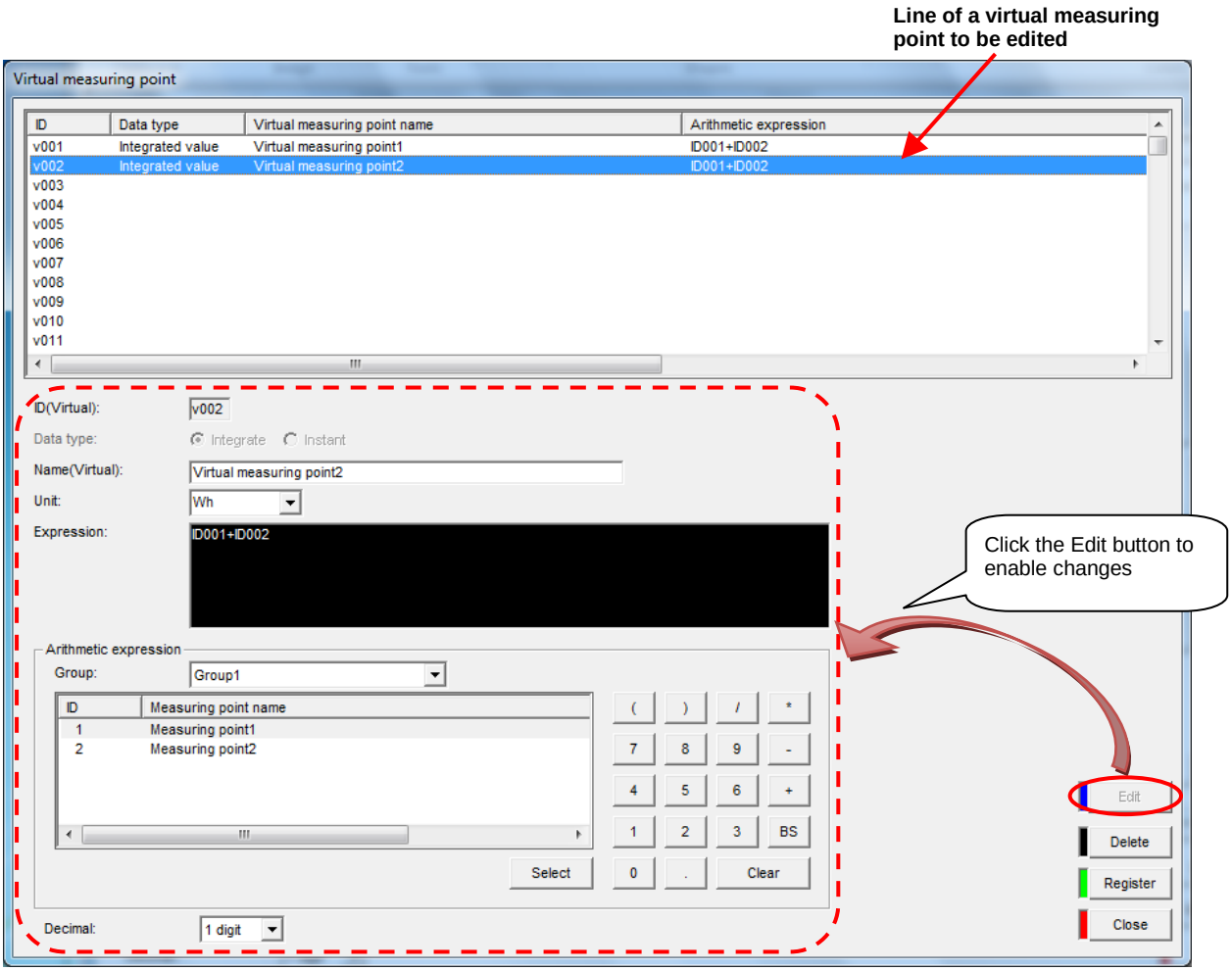
This section described how to edit registration information of a virtual measuring point.

1 Displaying the [Virtual measuring point] dialog box

Click the [Virtual] button in the dialog box of project setting.

2 Selecting a virtual measuring point you want to edit, and click the [Edit] button

Double-click a line of a virtual measuring point you want to edit on the list in the [Virtual measuring point] list dialog box, or select a line of a virtual measuring point you want to edit, and then click the [Edit] button



3 Editing the items to be changed and registering them

After editing the items to be changed, click the [Register] button.

* The entries and conditions for each item are similar to those at registering a new virtual measuring point.

Remarks

- **You cannot edit the [Expression] if it is registered as a specific consumption measuring point.**

4.5.2. Specific consumption measuring point registration

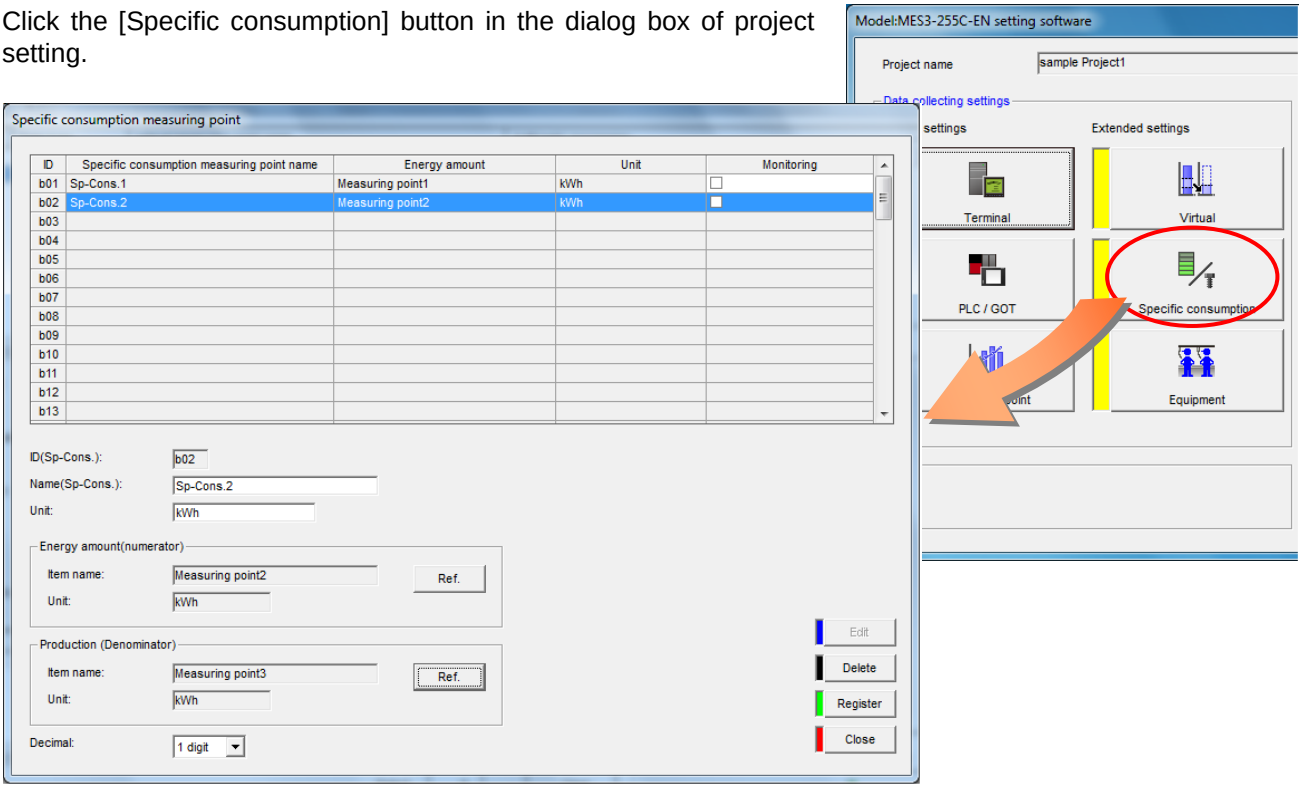
This section explains the procedure on the [Specific consumption measuring point].
A specific consumption measuring point refers to a measuring point for which the result of dividing energy amount by production amount is used as measurement data. A maximum of 64 measuring points (excluding the 255 measuring points and the 128 virtual measuring points) can be registered.

Checking the list of registered specific consumption measuring points

The following describes how to display and check the list of specific consumption measuring points.

1 Displaying the [Specific consumption measuring point] dialog box

Click the [Specific consumption] button in the dialog box of project setting.



2 Checking the registration information

Check the following information displayed in the [Specific consumption measuring point] list.

[ID] : Specific consumption measuring point ID
[Specific consumption measuring point name] : Specific consumption measuring point name
[Energy amount] : Measuring point name set for energy amount to be the numerator of the specific consumption
[Unit] : Registered unit
[Monitoring] : Registered monitoring on/off state

Registering a new specific consumption measuring point

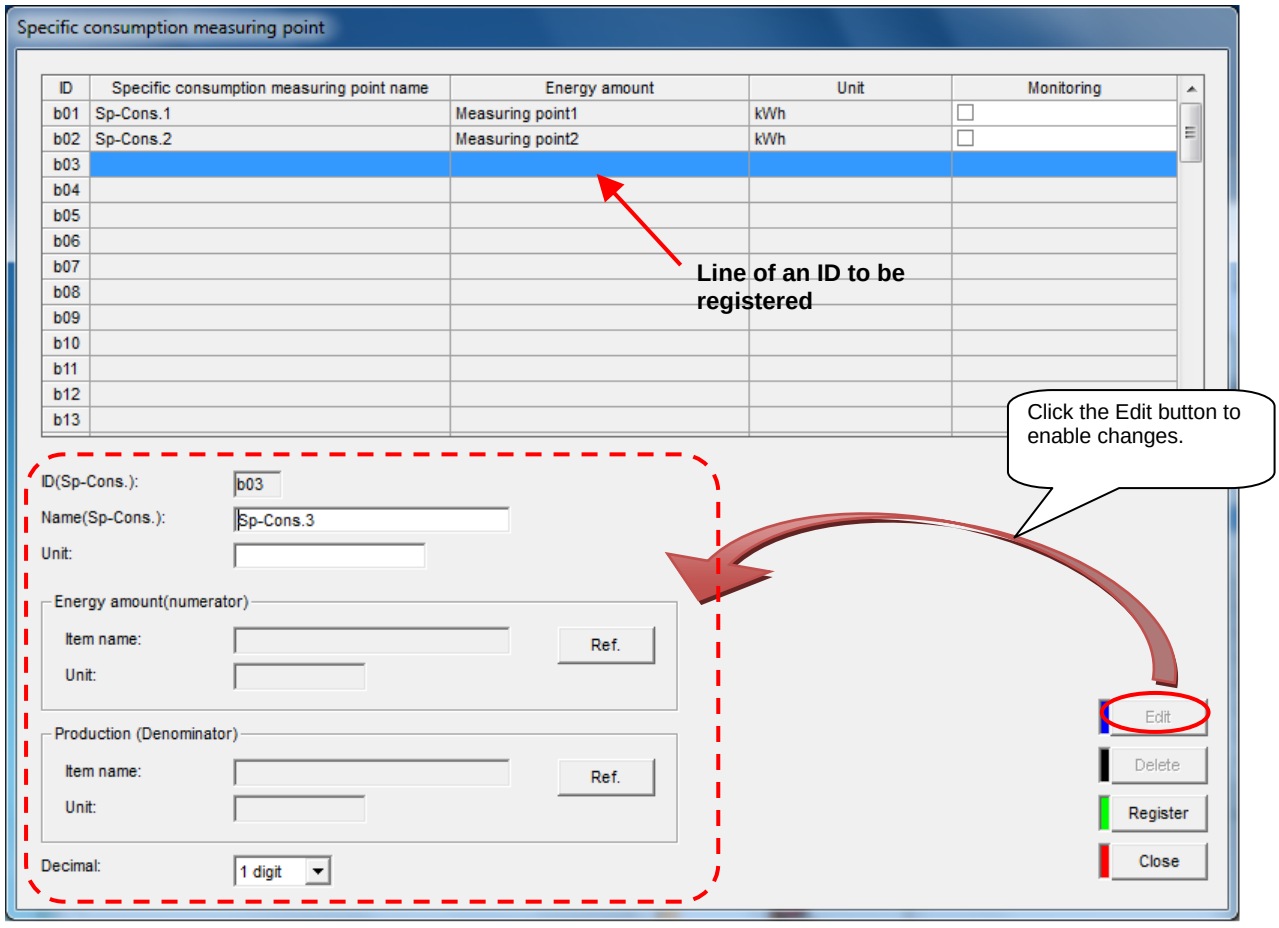
This section described how to register a new specific consumption measuring point.

1 Displaying the [Specific consumption measuring point] dialog box

Click the [Specific consumption] button in the dialog box of project setting.

2 Selecting the line to register, and clicking the [Edit] button

Double-click a line of an ID you want to register on the list in the [Specific consumption measuring point] list dialog box, or select a line of an ID you want to register, and then click the [Edit] button.



Remarks

- You can select and register any specific consumption measuring point. (Also, you can create a free ID.)
- You cannot register a specific consumption measuring point when no measuring point or virtual measuring point for an integrated value is registered. (The [Edit] button is disabled.)

3 Entering or selecting the items

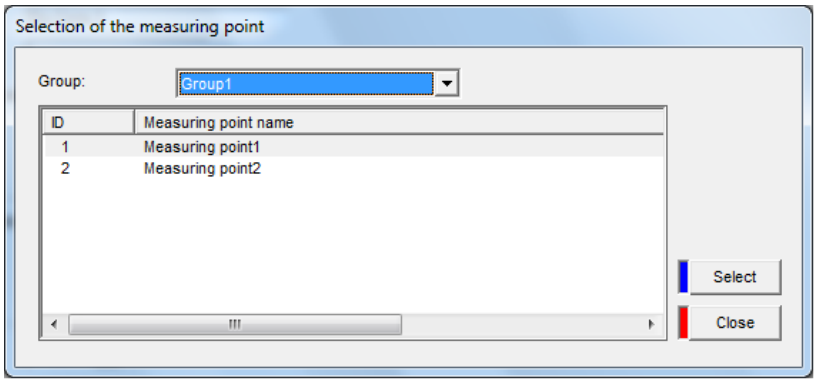
Enter or select the following items.

<table>
<tr><td>[Name(Sp-Cons.)]</td><td colspan="2">Enter a name of a Specific consumption measuring point. (This name is shown in the graphs or the list of measuring points on the EcoWebServerIII page)</td></tr>
<tr><td></td><td>Characters</td><td>Up to 24 characters</td></tr>
<tr><td></td><td>Prohibited characters</td><td>The following characters cannot be registered:
¥ / : , ; * ? “ < > |</td></tr>
<tr><td></td><td colspan="2">*1 If you use any disallowed characters, which are listed in “Appendix: Disallowed Character List,” the characters may not be displayed properly in the browser display of EcoWebServerIII.
*2 A duplicate specific consumption measuring point name cannot be registered.</td></tr>
<tr><td>[Unit]</td><td colspan="2">Type a unit directly. The entry conditions are as follows.</td></tr>
<tr><td></td><td>Characters</td><td>Up to 16 characters</td></tr>
<tr><td></td><td>Prohibited characters</td><td>The following characters cannot be registered:
¥ : , ; * ? “ < > |</td></tr>
<tr><td>[Decimal]</td><td colspan="2">Select a number of digits after the decimal point.
A computation result is rounded at the number of digits specified here.
(Ex.) "1 digit" is selected -> a computation result is truncated a number to 1 decimal place</td></tr>
</table>

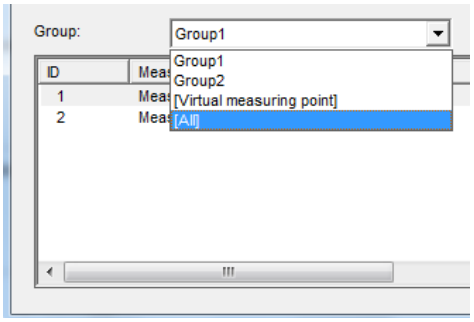
4 Selecting an energy amount (numerator)

Using the following procedure, select a measuring point for an energy amount to be the numerator of the specific consumption.

(1) Click the [Ref] button in the [Energy amount (numerator)] area to display the [Selection of the measuring point] dialog box.



(2) Select any of registered group, demand measuring point, [Virtual measuring point], and [All] from the [Group] pull-down menu.



* The [Virtual measuring point] can be selected only when a virtual measuring point for an integrated value is registered.
* Among measuring points registered with the selected group, only the integrated values are displayed in the list.
* [Demand measuring point] can be selected only with the EcoWebServerIII with demand control function.

(3) Double-click the measuring point name or the virtual measuring point name,

Or

Select the measuring point name or the virtual measuring point name, and click the [Select] button.

(4) The name and unit of the selected measuring point will be display in the fields in the [Energy amount (numerator)].

*1 The following measuring points can be selected as the "demand measuring point" groups when using the EcoWebServerIII with demand control function.

1001 Integrated value of Consumption (Whole day)
1032 Integrated value of Consumption (Time zone 1)
1033 Integrated value of Consumption (Time zone 2)
1034 Integrated value of Consumption (Time zone 3)
1035 Integrated value of Consumption (Time zone 4)
1036 Integrated value of Consumption (Time zone 5)
1037 Integrated value of Consumption (Time zone 6)
1038 Integrated value of Consumption (Time zone 7)
1039 Integrated value of Consumption (Time zone 8)
1040 Integrated value of Consumption (Time zone 9)
1041 Integrated value of Consumption (Time zone 10)

(The integrated value of consumption (Time zone 1) to integrated value of consumption (Time zone 10) can be selected only when [Carry out management based on calendar setting] is checked.)

5 Selecting production amount (denominator)

Select a measuring point for production amount to be the denominator of the specific consumption.
The procedure to select a measuring point is similar to **4 Select an energy amount**.

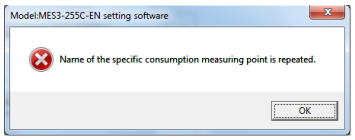
6 Registering

Click the button on the [Specific consumption measuring point] dialog box to register.

[Register] button : Register the specific consumption measuring point information you set.
[Close] button : Back to the project setting dialog box.

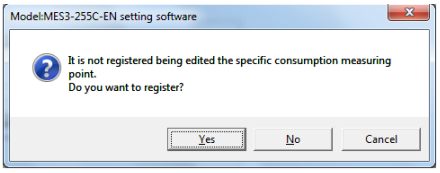
*1 If the set details are not proper, an error message as shown on the right is displayed when clicking the [Register] button according to the error details. Reset the details so as to meet the conditions of each item.

(Example of display)



*2 After modification of entry details of each item, click the [Close] button instead of clicking the [Register] button, the message shown on the right is displayed.

[Yes] : To register
[No] : Not to register
[Cancel] : Back to the [Specific consumption measuring point] dialog box.

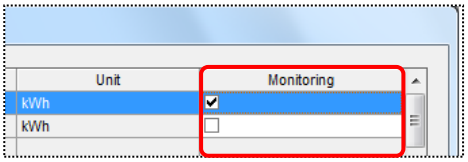


7 Setting the specific consumption target value monitoring

Set the specific consumption target value monitoring.

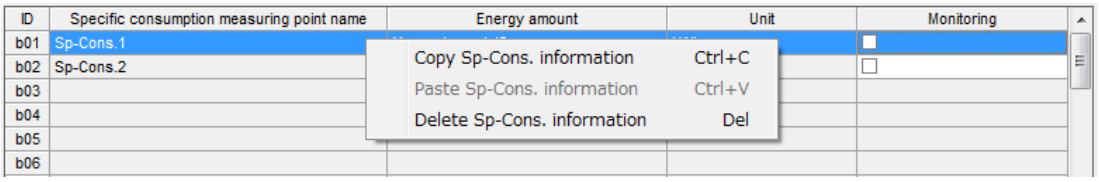
Enable or disable the specific consumption target value monitoring with the [Monitoring] check box

“Checked” : Monitoring enabled
“Not checked” : Monitoring disabled



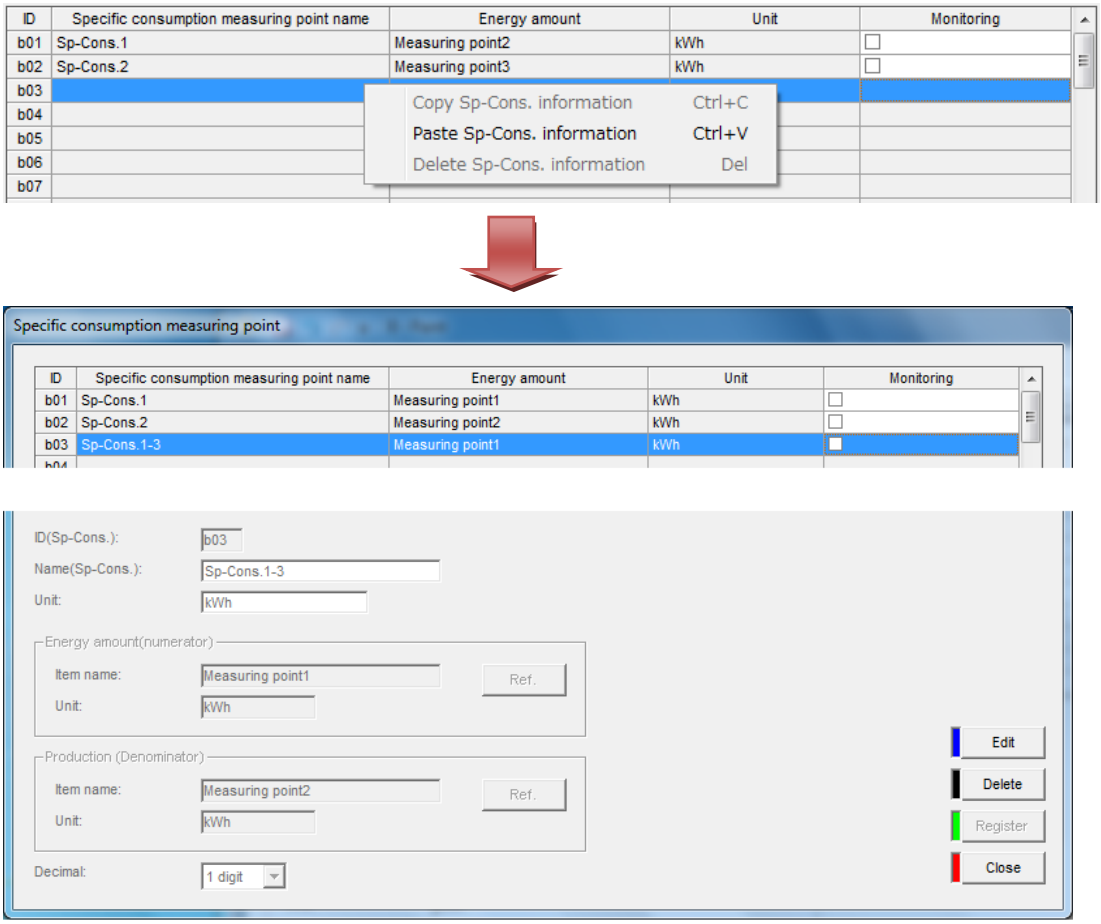
<Copying specific consumption measuring point information>

To copy registered specific consumption measuring point information, select the line to copy and press the right-click menu [Copy Sp-Cons. information] or the short-cut keys Ctrl+C.



<Pasting specific consumption measuring point information>

To paste the copied specific consumption measuring point information, select the line to paste and press the right-click menu [Paste Sp-Cons. information] or the short-cut keys Ctrl+V.



Remarks

- Multiple lines cannot be copied and pasted.
- Specific consumption measuring point information cannot be pasted into a registered line.
- The "–"+ pasted line No. is automatically added to the end of the pasted specific consumption measuring point name.
- The pasted specific consumption measuring point information is automatically registered.

Deleting a registered specific consumption measuring point

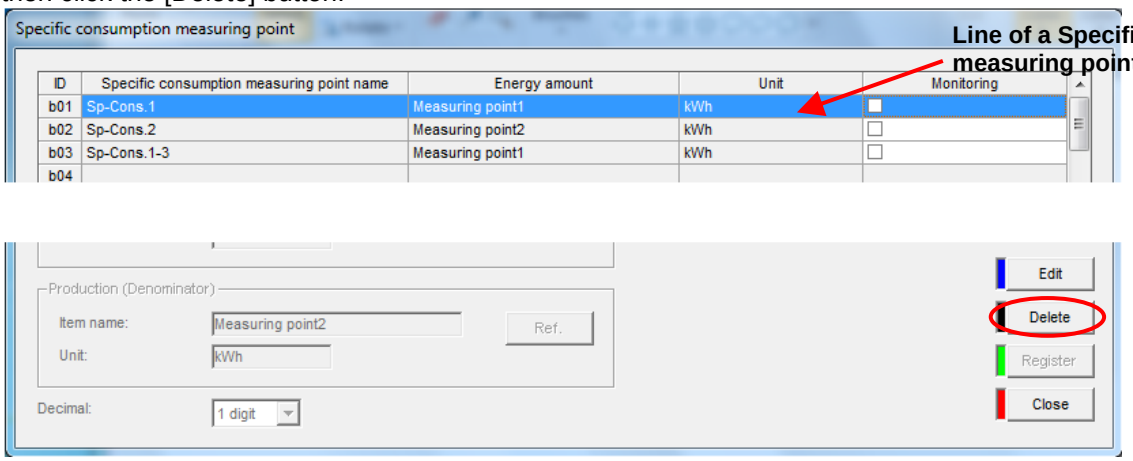
This section described how to delete a registered specific consumption measuring point.

1 Displaying the [Specific consumption measuring point] dialog box

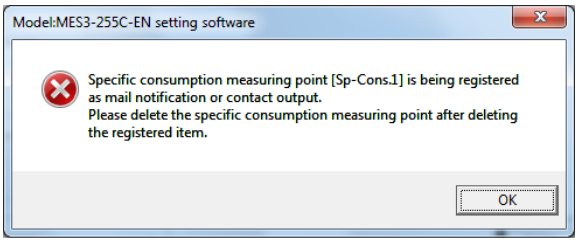
Click the [Specific consumption] button in the dialog box of project setting.

2 Selecting a specific consumption measuring point you want to delete, and clicking the [Delete] button

Select a line of a measuring point you want to delete in the [Specific consumption measuring point] list, and then click the [Delete] button.

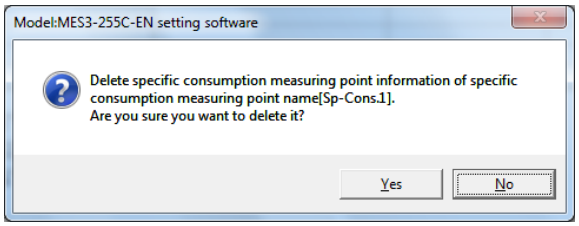


* If the specific consumption measuring point you select is registered as a monitoring notification, the message on the right will appear.
Click the [OK] button to delete the registered item first.


Model:MES3-255C-EN setting software
Specific consumption measuring point [Sp-Cons.1] is being registered as mail notification or contact output.
Please delete the specific consumption measuring point after deleting the registered item.
OK

3 Deleting

The message confirming deletion is displayed. Click the button to execute deletion.


Model:MES3-255C-EN setting software
Delete specific consumption measuring point information of specific consumption measuring point name[Sp-Cons.1].
Are you sure you want to delete it?
Yes
No

[Yes] button : Delete the specific consumption measuring point and back to the [Specific consumption measuring point] dialog box.
[No] button : Cancel the deletion and back to the [Specific consumption measuring point] dialog box.

After the specific consumption measuring point is deleted, its registration information is removed from the list in the [Specific consumption measuring point] list.

Remarks

- You can delete it by clicking the right-click menu [Delete Sp-Cons. information], or by pressing the [Delete] key.

Editing a registered specific consumption measuring point

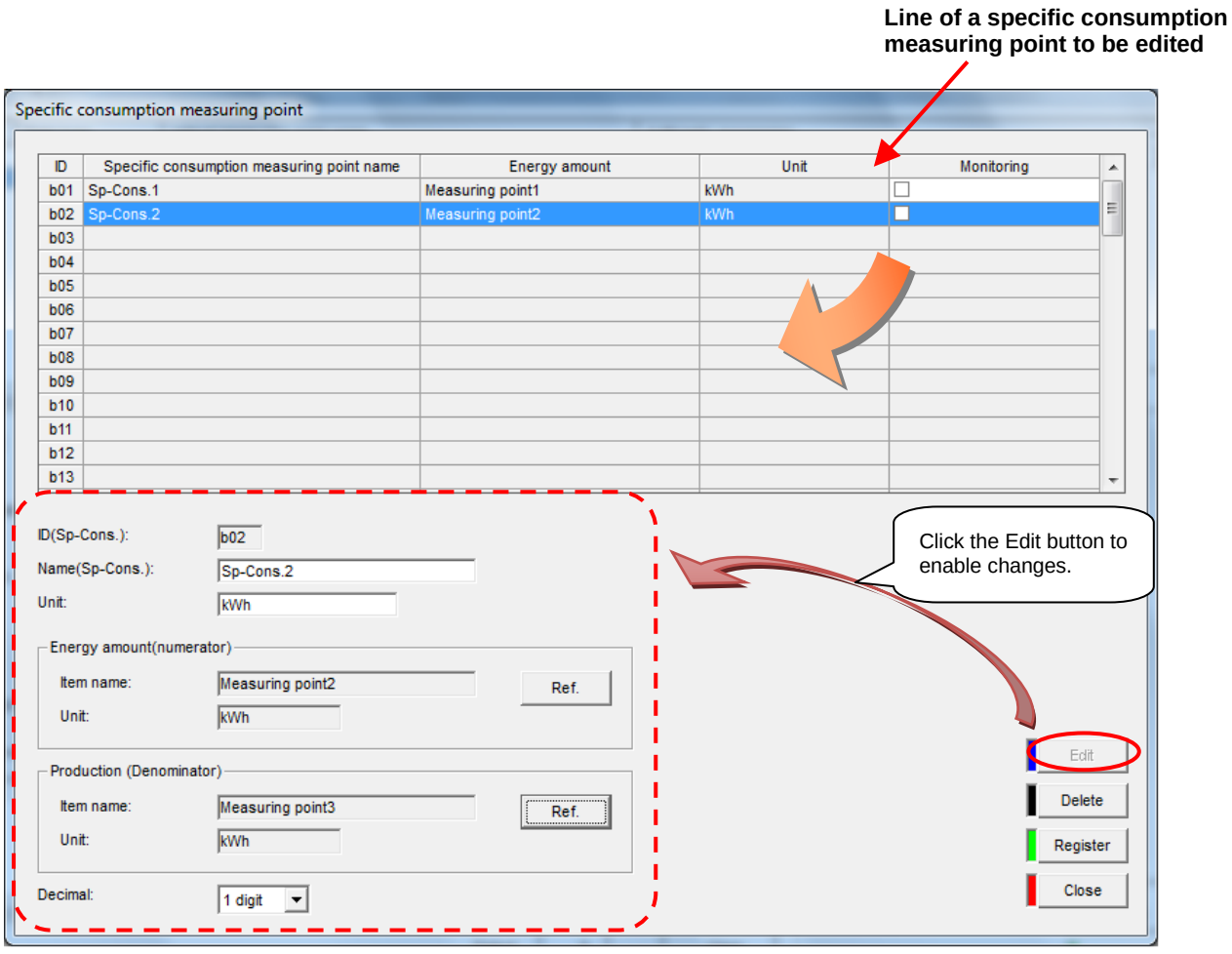
This section described how to edit registration information of a specific consumption measuring point.

1 Displaying the [Specific consumption measuring point] dialog box

Click the [Specific consumption] button in the dialog box of project setting.

2 Selecting a specific consumption measuring point you want to edit, and clicking the [Edit] button

Double-click a line of a specific consumption measuring point you want to edit on the list in the [Specific consumption measuring point] list dialog box, or select a line of a specific consumption measuring point you want to edit, and then click the [Edit] button.



3 Editing the items to be changed and registering them

Edit the item to be changed and then click the [Register] button.

* The entries and conditions for each item are similar to those at registering a new specific consumption measuring point.

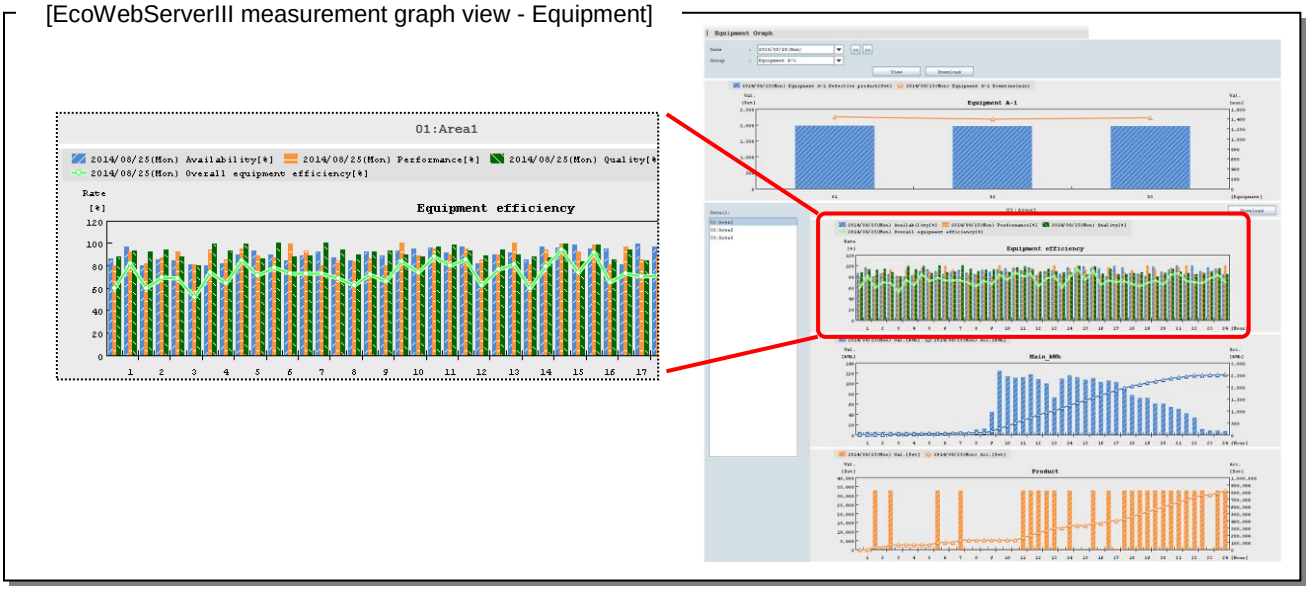
4.5.3. Equipment registration

This section explains the procedure on the [Equipment].
In the [Equipment], you can set equipment parameters: "Std. cycle", "Time 1", "Time 2", "Quantity 1" and "Quantity 2".

Std. cycle	: Standard cycle time
Time 1	: The loading time
Time 2	: The stop time
Quantity 1:	: The process quantity
Quantity 2	: The qualified product quantity

Based on these parameters, the EcoWebServerIII main unit calculate and display the "Availability", "Performance", "Quality" and "Overall equipment efficiency" that are indexed of equipment efficiency.
Also, the graphs of the display measuring point and the equipment efficiency can be displayed side-by-side by registering "display measuring point" for equipment. (A maximum of 10 "display measuring points" can be registered per equipment.)
A maximum of 42 points for equipment can be registered.

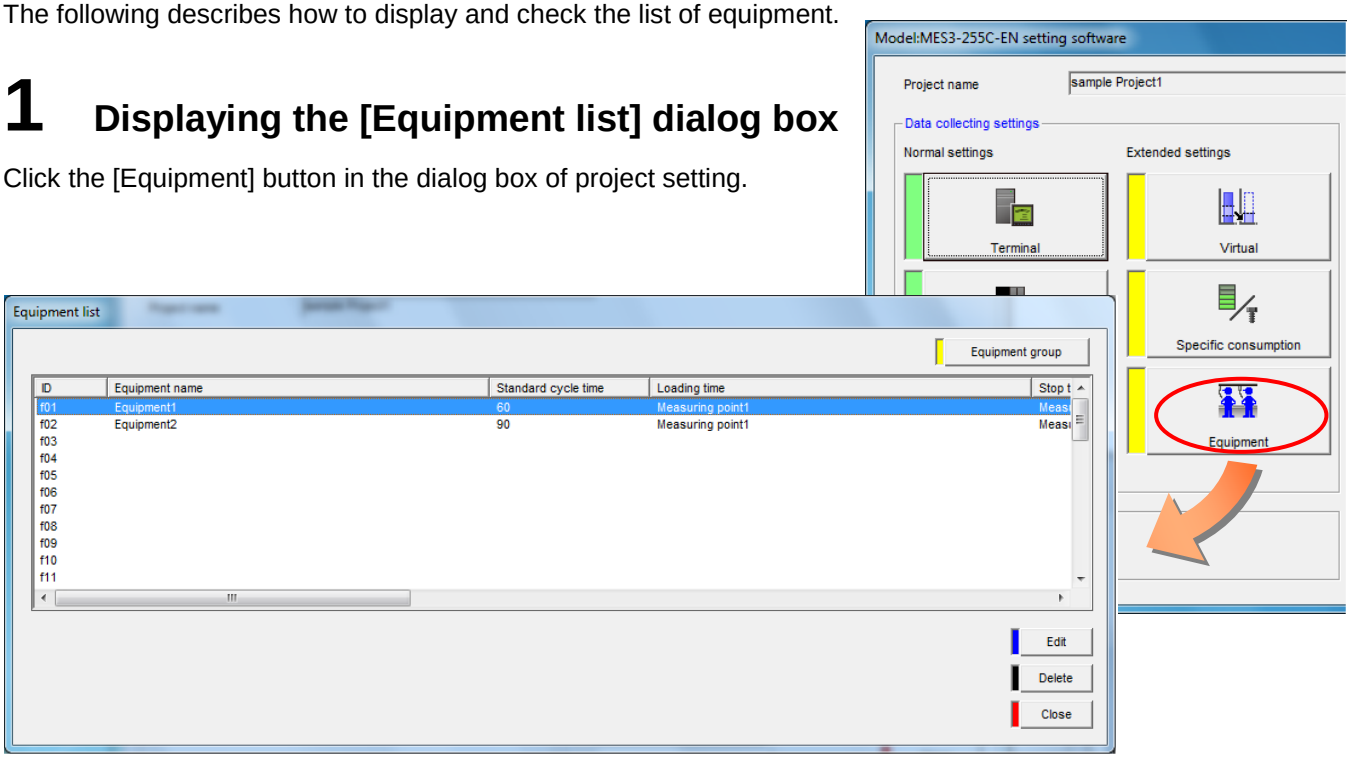
[EcoWebServerIII measurement graph view - Equipment]



* For details about the measurement graph view, refer to **Instruction Manual – Operation**.

Checking the list of registered equipment

The following describes how to display and check the list of equipment.



1 Displaying the [Equipment list] dialog box

Click the [Equipment] button in the dialog box of project setting.

2 Checking the registration information

Check the following information displayed on the list.

[ID]	: Equipment ID
[Equipment name]	: Name of registered equipment
[Standard cycle time]	: Registered reference cycle time
[Loading time]	: Name of a measuring point registered as a loading time
[Stop time]	: Name of a measuring point registered as a stop time
[Process quantity]	: Name of a measuring point registered as a process quantity
[Qualified product quantity]	: Name of a measuring point registered as a qualified product quantity
[Display measuring point ID]	: Measuring point ID or virtual measuring point ID registered as a display measuring point ID (displayed in order of setting)

Registering new equipment

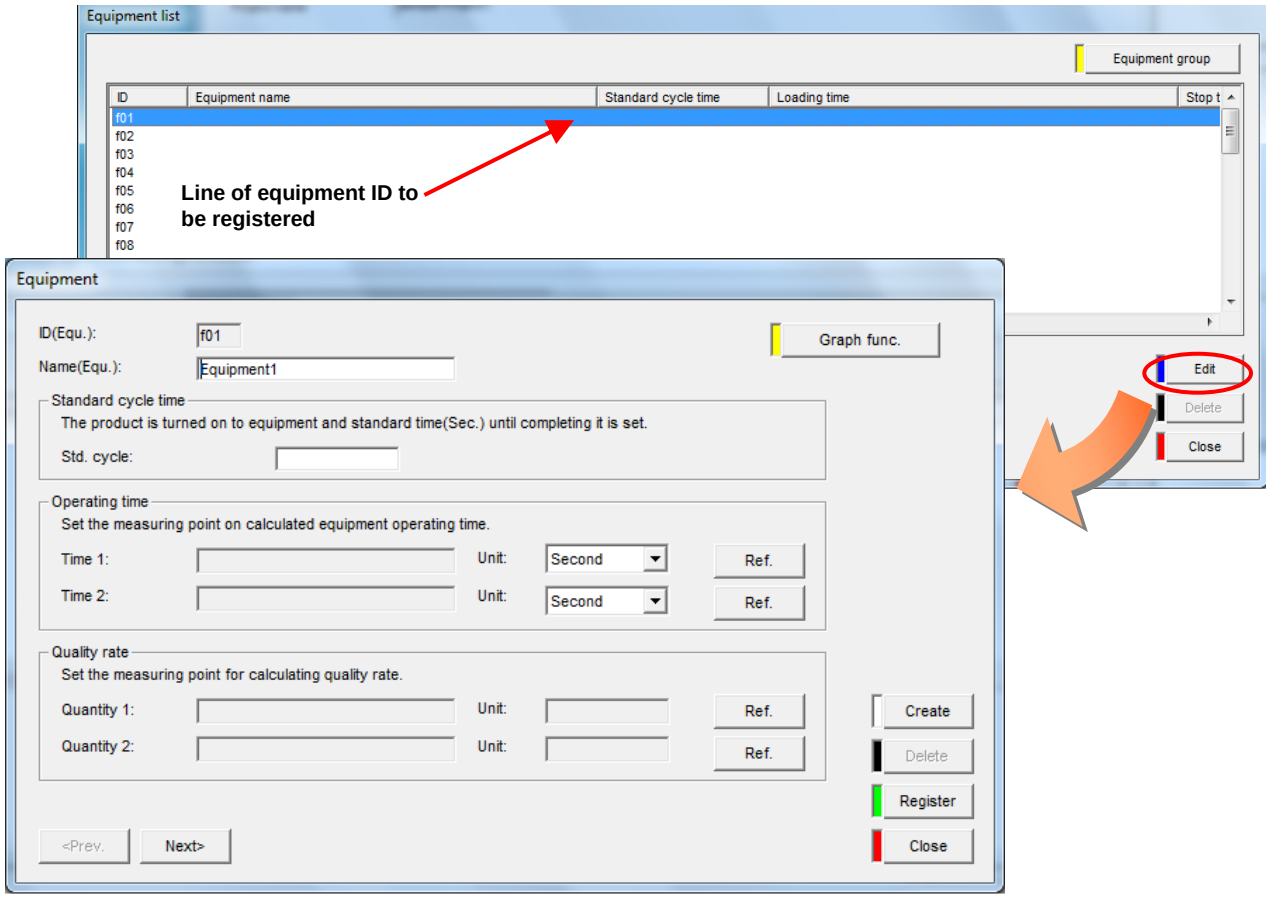
This section described how to register new equipment.

1 Displaying the [Equipment list] dialog box

Click the [Equipment] button in the dialog box
of project setting.

2 Displaying the [Equipment] dialog box

Double-click a line of an equipment ID you want to register on the list in the [Equipment list] dialog box, or Select a line of an ID you want to register, and then click the [Edit] button.



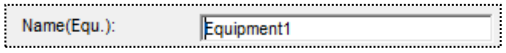
Remarks

- You can select and register any virtual measuring point. (Also, you can create a free ID.)
- You cannot register equipment when no measuring point or virtual measuring point for an integrated value is registered. (The [Edit] button is disabled.)

3 Entering or selecting the items

(1) [Name(Equ.)]

Enter a name of equipment.
(This equipment name is shown on the EcoWebServerIII page.)



The entry conditions are as follows.

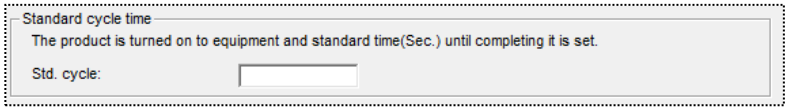
Number of characters	Up to 24 characters
Prohibited characters	The following characters cannot be registered: # ¥ / : , ; * ? " < > |

*1 If you use any disallowed characters, which are listed in "Appendix: Disallowed Character List," the characters may not be displayed properly in the browser display of EcoWebServerIII.

*2 A duplicate equipment name can be registered.

(2) [Std. cycle]

Enter a reference time between the introduction of a product into the equipment and the completion.

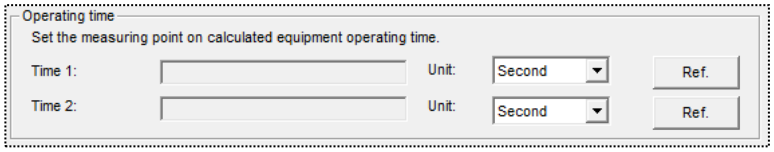


The entry conditions are as follows.

Range	1 to 2678400 [seconds]

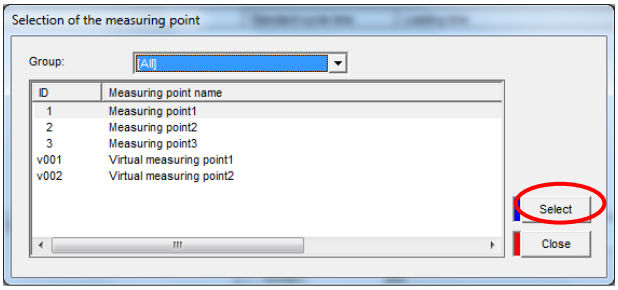
(3) [Time 1], [Time 2]

Set measuring points to measure the loading time ([Time 1]) and the stop time ([Time 2]) of the equipment.



After you clicked the [Ref.] button, the [Selection of the measuring point] dialog box will appear.

Double-click a line of a measuring point you want to set,
Or
Select a line of a measuring point you want to set, and then click the [Select] button.



<Unit>

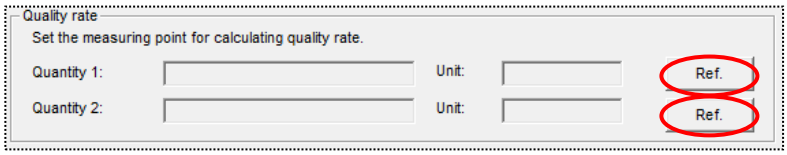
Select a unit from [Second], [Minute], and [Hour].

*** The unit is used at the calculation of "Time availability".**
Match it with the unit registered for the measuring point selected as a loading time and a stop time.

(Ex.) The unit of the measuring point selected is a second => Select the "Second".
The unit of the measuring point selected is a minute => Select the "Minute".
The unit of the measuring point selected is an hour => Select the "Hour".

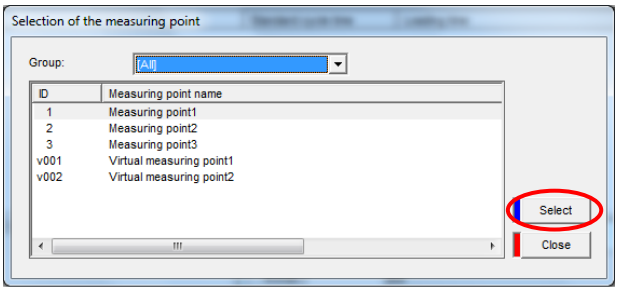
(4) [Quantity 1], [Quantity 2]

Set the measuring points to measure the process quantity ([Quantity 1]) and qualified product quantity([Quantity 2]).



After you clicked the [Ref.] button, the [Selection of the measuring point] dialog box will appear.

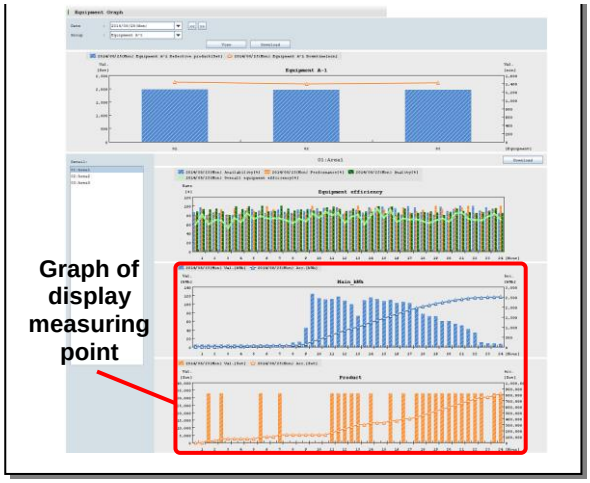
Double-click a line of a measuring point you want to set,
Or
Select a line of a measuring point you want to set, and then click the [Select] button.



4 Setting a display measuring point

Set measuring points to display graphs under the equipment efficiency graph in the measurement graph view of equipment.

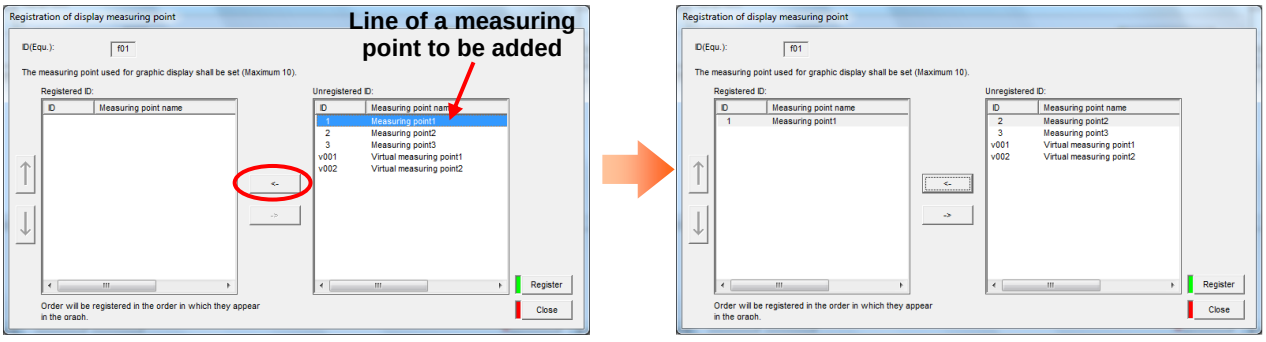
[EcoWebServerIII measurement graph view - Equipment]



(1) Add/delete a display measuring point

After you clicked the [Graph func.] button in the [Equipment] dialog box, the [Registration of display measuring point] dialog box will appear.

Double-click a line of a measuring point you want to register in the [Unregistered ID], or Select a line of a measuring point you want to register, and then click the [<-] button


Registration of display measuring point
Line of a measuring point to be added
ID(Equ.):
f01
The measuring point used for graphic display shall be set (Maximum 10).
Registered ID:
Unregistered ID:
ID
Measuring point name
1 Measuring point1
2 Measuring point2
3 Measuring point3
v001 Virtual measuring point1
v002 Virtual measuring point2
<-
->
Register
Close
Order will be registered in the order in which they appear in the graph.

The measuring point selected is added to the last line in the [Registered ID].

*1 If you want to delete a measuring point from a group, double-click a line of the measuring point you want to delete on the [Registered ID], or select a line of a measuring point you want to delete, and then click the [->] button

(2) Change the order in which the display measuring points are listed

The graphs in the "Graph view - Equipment Graph" of the EcoWebServerIII is displayed in order of measuring points registered in [Registered ID],

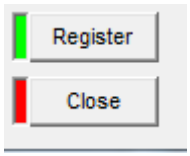
To change the registration order of the measuring points in the [Registered ID], select a line of equipment, and click the [↑] button and the [↓] button.
Click [↑] button once to move up one line.
Click [↓] button once to move down one line.

(3) Register a display measuring point

Click the [Register] button on the [Registration of display measuring point] dialog box.

5 Registering

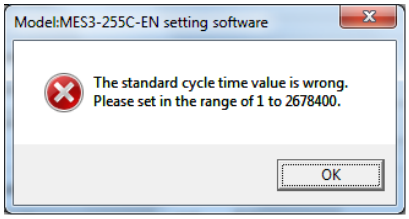
Click the button on the [Equipment] dialog box to register equipment.



[Register] button : Register equipment information you set.
[Close] button : Back to the [Equipment list] dialog box.

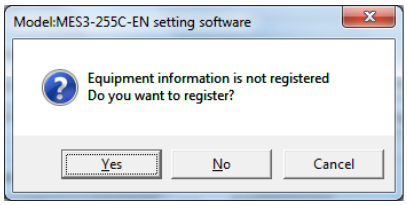
* If the set details are not proper, an error message as shown on the right is displayed when clicking the [Register] button according to the error details.
Reset the details so as to meet the conditions of each item.

(Example of display)



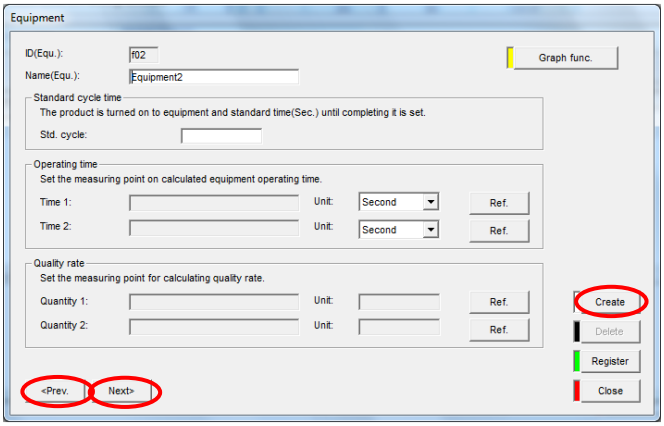
*2 After modification of entry details of each item, click the [Create],[< Prev.], [Next>] or [Close] button instead of clicking the [Register] button, the message shown on the right is displayed.

[Yes] : To register
[No] : Not to register.
[Cancel] : Back to the [Equipment] dialog box.



<To register equipment continuously>

To register equipment continuously, click the [Create] button and repeat the step **3 to 5**.
Click the [<Prev.] button to check, delete, and change the registration information of the previous equipment.
Click the [Next>] button to check, delete, and change the registration information of the next equipment.



Deleting registered equipment

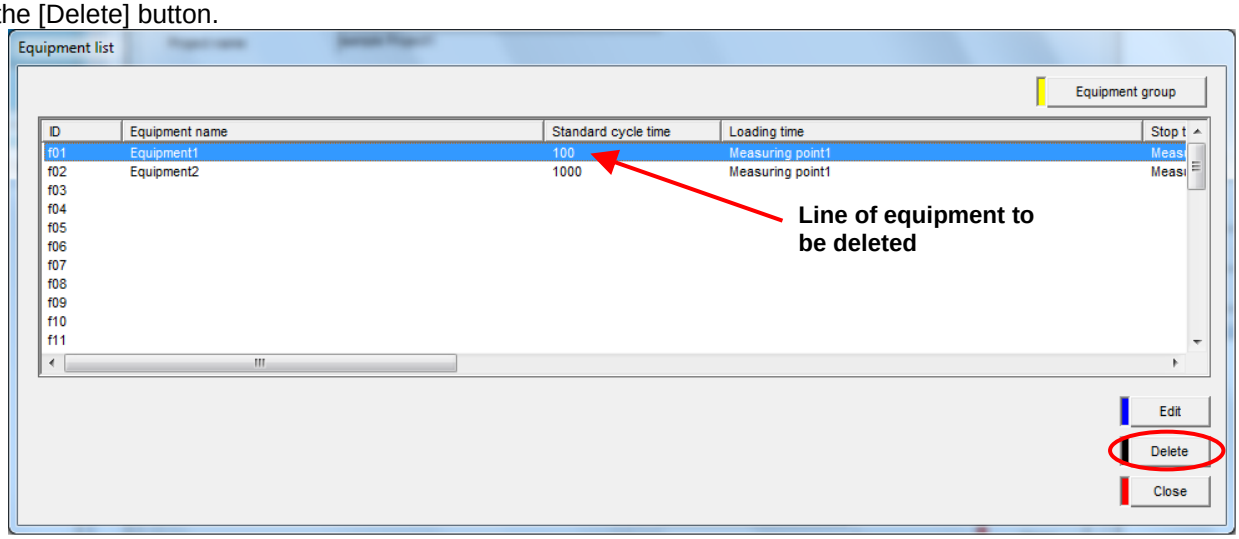
This section described how to delete registered equipment.

1 Displaying the [Equipment list] dialog box

Click the [Equipment] button in the dialog box of project setting.

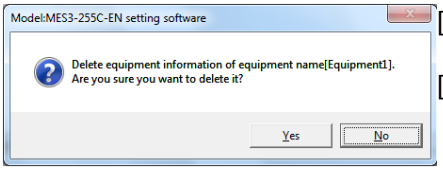
2 Selecting equipment you want to delete, and clicking the [Delete] button

Select a line of a measuring point you want to delete in the list in the [Equipment list] dialog box, and then click the [Delete] button.



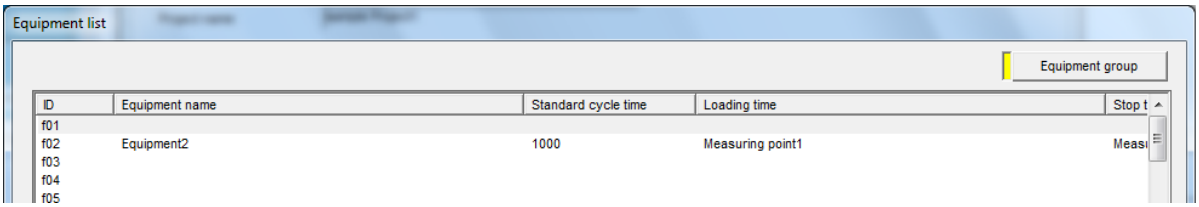
3 Deleting

A delete confirmation message appears. Click the button to delete the terminal.



[Yes] button : Delete the equipment and back to the [Equipment list] dialog box.
[No] button : Cancel the deletion and back to the [Equipment list] dialog box.

After the equipment is deleted, its registration information is removed from the list in the [Equipment list].



Remarks

- You can delete it using the [Delete] button on the [Equipment] dialog box.

Editing the registered information of registered equipment

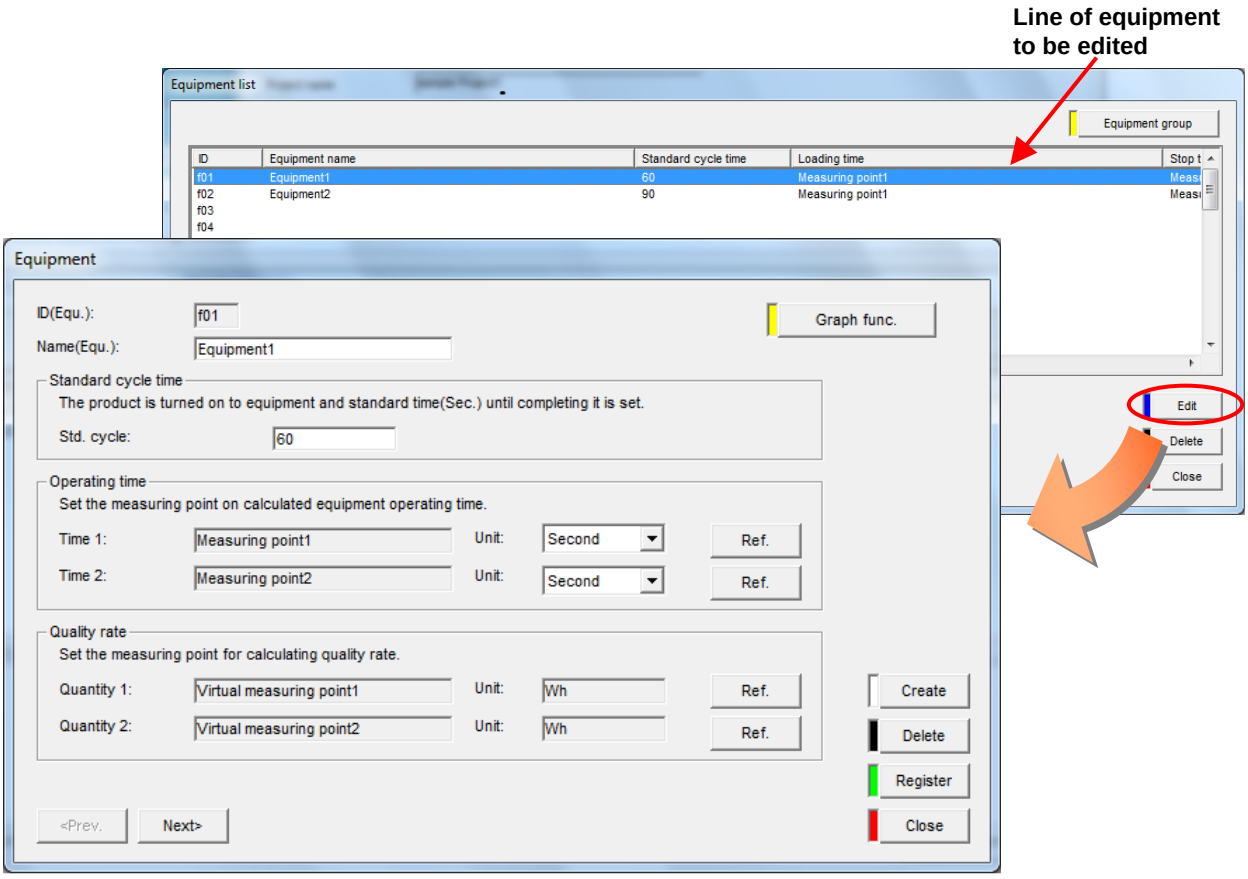
This section described how to edit registration information of equipment.

1 Displaying the [Equipment list] dialog box

Click the [Equipment] button in the dialog box of project setting.

2 Selecting equipment you want to edit, and clicking the [Edit] button

Double-click a line of equipment you want to edit on the list in the [Equipment list] dialog box, or Select a line of equipment you want to edit, and then click the [Edit] button.



3 Editing the items to be changed and registering them

After editing the items to be changed, click the [Register] button.

* The entries and conditions for each item are similar to those at registering new equipment.

4.5.4. Equipment group registration

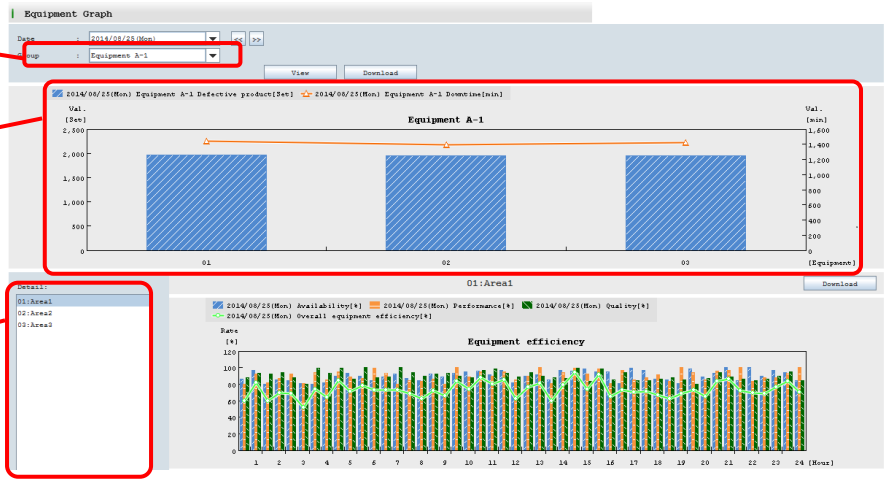
This section explains the procedure on the registration of device group.
Equipment group refers to a group of equipment. It is listed in the "Measurement graph view - Equipment of the EcoWebServerIII for each equipment group registered here. A maximum of 42 groups can be registered.

[EcoWebServerIII Graph view - Equipment Graph]

Equipment group selection

Graph of equipment group:
With the equipment included in the selected equipment group as the horizontal axis, display the total of defective products and downtime for a day in the graph.

Equipment details list:
List in order of the equipment group registered.



* For details about the measurement graph view, refer to **Instruction Manual – Operation**.

Remarks

- Equipment registered on the [Equipment] must be registered in any of groups.
  When there is equipment that is not registered in equipment group, a project can be saved but cannot be written into the EcoWebServerIII.
- You can register one equipment to more than one equipment group at the same time.

Checking the list of registered equipment groups

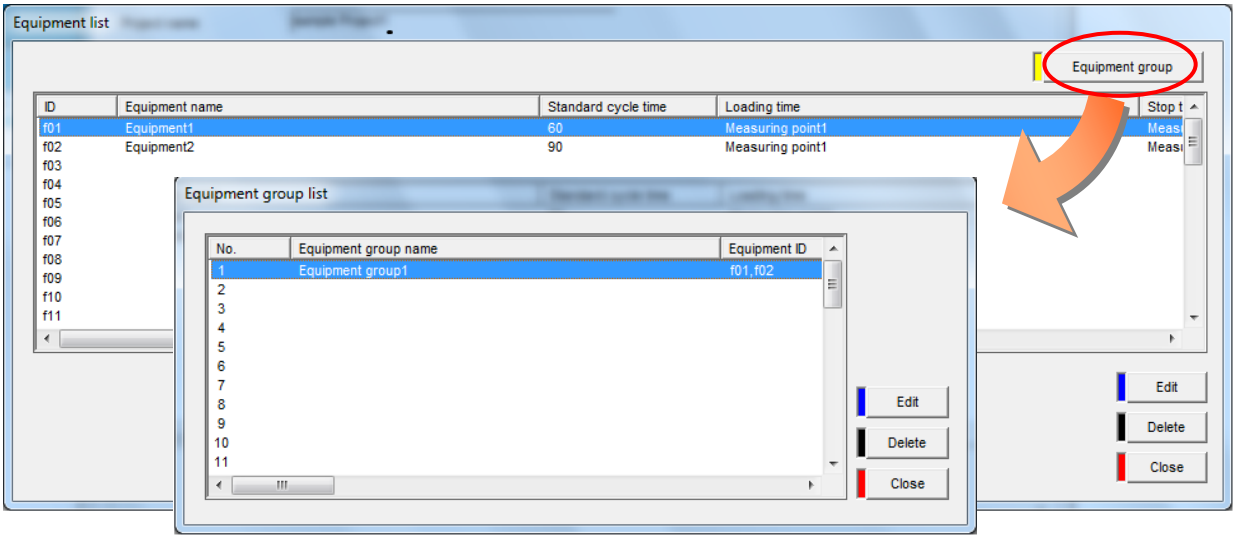
The following describes how to display and check the list of equipment groups.

1 Displaying the [Equipment list] dialog box

Click the [Equipment] button in the dialog box of project setting.

2 Displaying the [Equipment group list] dialog box

Click the [Equipment group] button in the dialog box of Device list.



3 Checking the registration information

Check the following information displayed on the list.

[No.] : Equipment group No.
[Equipment group name] : Name of registered equipment group
[Equipment ID] : Measuring point registered to the equipment group

Registering a new equipment group

This section described how to register a new equipment group.

1 Displaying the [Equipment list] dialog box

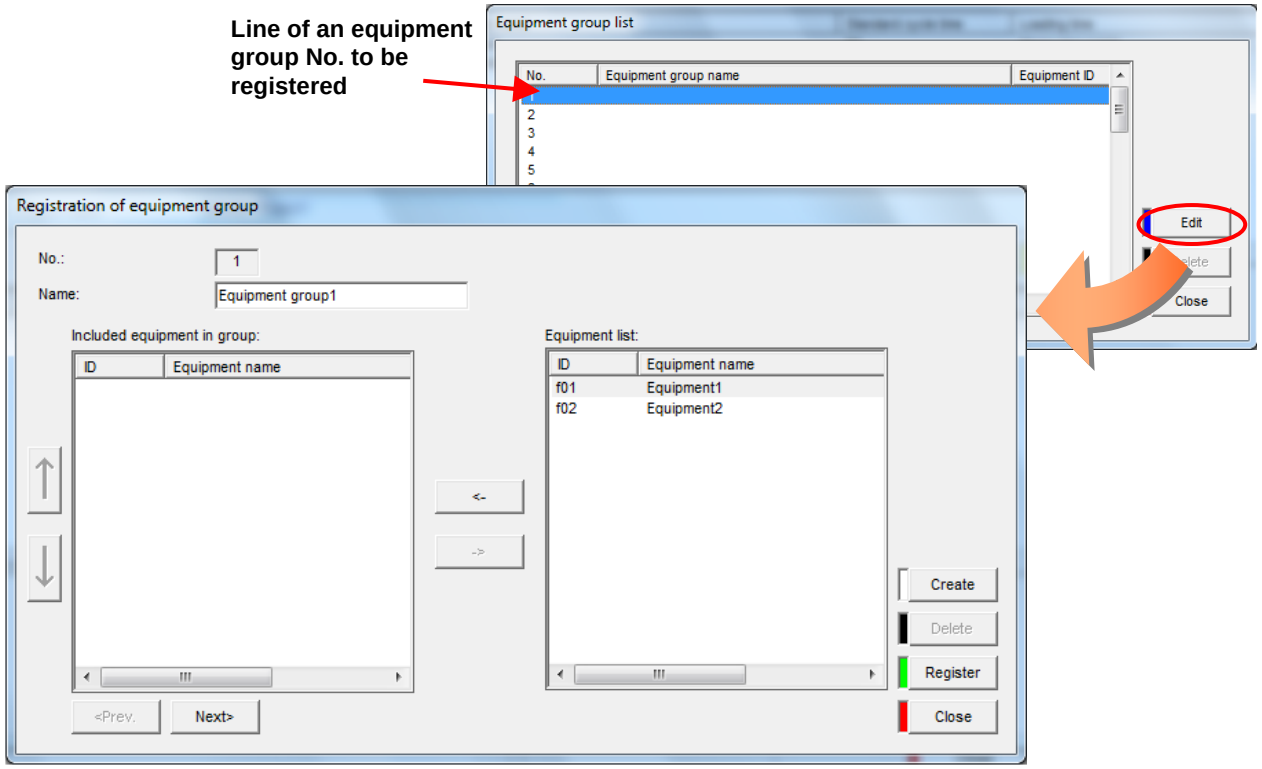
Click the [Equipment] button in the dialog box of project setting.

2 Displaying the [Equipment group list] dialog box

Click the [Equipment group] button in the dialog box of device list.

3 Displaying the [Registration of equipment group] dialog box

Double-click a line of the equipment group No. you want to register on the list in the [Equipment group list] dialog box, or select a line of an equipment group No. you want to register, and then click the [Edit] button.



Remarks

- You cannot register an equipment group when no equipment is registered.

4 Entering an equipment group name

Enter a name of equipment group.
(This group name is shown in the "Graph view - Equipment Graph" on the EcoWebServerIII page.)

The entry conditions are as follow:

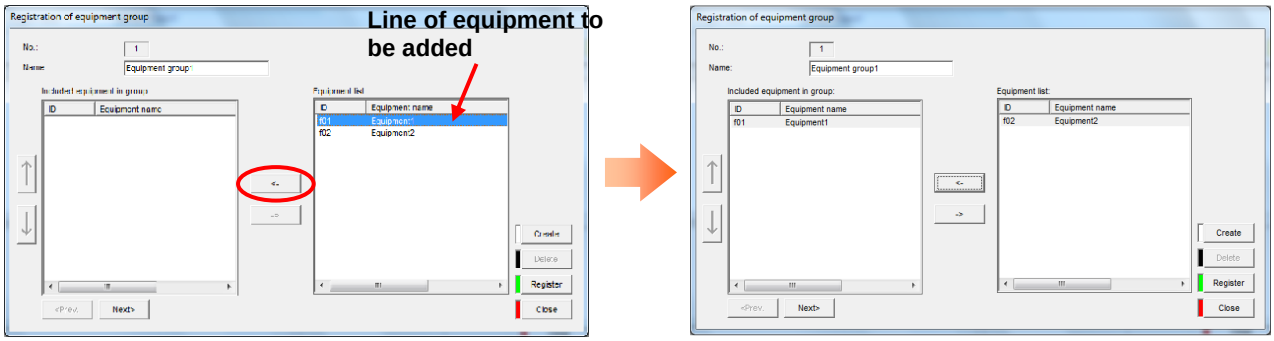
Number of characters	Up to 24 characters
Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? “ < > |

*1 If you use any disallowed characters, which are listed in "Appendix: Disallowed Character List," the characters may not be displayed properly in the browser display of EcoWebServerIII.

*2 A duplicate equipment group name cannot be registered.

5 Adding equipment to an equipment group

Double-click a line of equipment you want to add to a group on the [Equipment list], or select a line of equipment you want to add to a group, and then click the [<-] button.



The selected measuring point is added to the last line in the [Included equipment in group].

* If you want to delete equipment from a group, double-click the line of the measuring point you want to delete on the [Included equipment in group], or select a line of equipment you want to delete, and then click the [->] button.

6 Changing the order in which the equipment are listed

The equipment details list in the "Graph view - Equipment Graph" of the EcoWebServerIII is displayed in order of equipment registered in the [Included equipment in group].

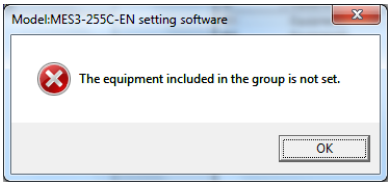
To change the registration order of the equipment in the [Included equipment in group] area, select a line of equipment, and click the [↑] button and the [↓] button.
Click [↑] button once to move up one line.
Click [↓] button once to move down one line.

7 Registering

Click the button on the [Registration of equipment group] dialog box to register equipment.

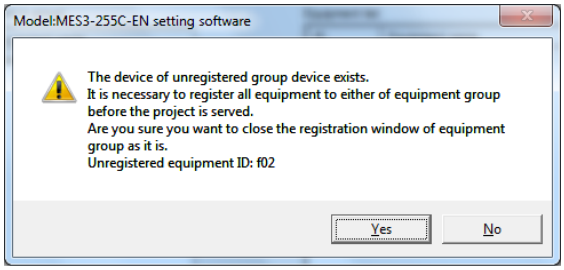
[Register] button : Register the equipment group with information you set.
The registration information will be reflected to the [Equipment group list] dialog box.
[Close] button : Back to the [Equipment group list] dialog box.

*1 If there is no equipment in the [Included equipment in group], the massage on the right will appear at clicking the [register] button.
Click the [OK] button to register equipment.



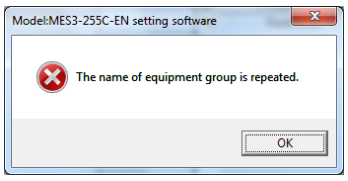
*2 If there is equipment that is not registered in any equipment group, the massage on the right will appear at clicking the [Close] button.

[Yes] button : Close the [Registration of equipment group] dialog box.
[No] button : Back to the [Registration of equipment group] dialog box.


Model:MES3-255C-EN setting software
The device of unregistered group device exists.
It is necessary to register all equipment to either of equipment group before the project is served.
Are you sure you want to close the registration window of equipment group as it is.
Unregistered equipment ID: f02
Yes
No

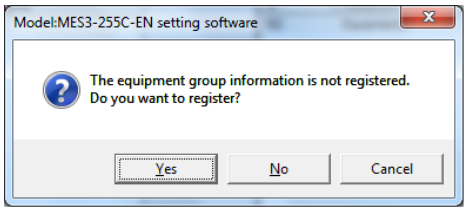
*3 If the set details are not proper, an error message as shown on the right is displayed when clicking the [Register] button according to the error details.
Reset the details so as to meet the conditions of each item.

(Example of display)



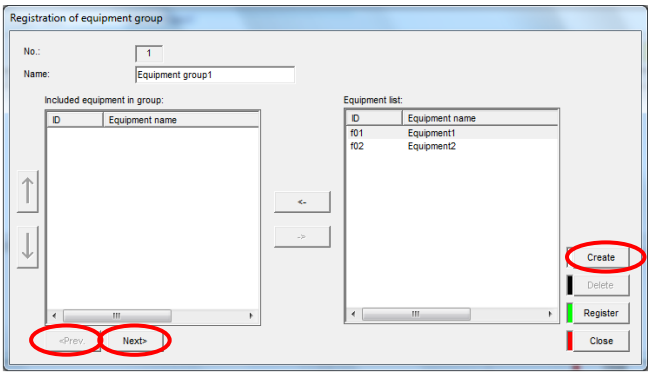
*4 After modification of entry details of each item, click the [Create], [<Prev.], [Next>] or [Close] button instead of clicking the [Register] button, the message shown on the right is displayed.

[Yes] button : To register
[No] button : Not to register
[Cancel] button : Back to the [Registration of device group] dialog box.



<To register equipment group continuously>

To register equipment groups continuously, click the [Create] button and repeat the step 4 to 7.
Click the [< Prev.] button to check, delete, and change the registration information of the previous equipment group.
Click the [Next >] button to check, delete, and change the registration information of the next equipment group.



Deleting a registered equipment group

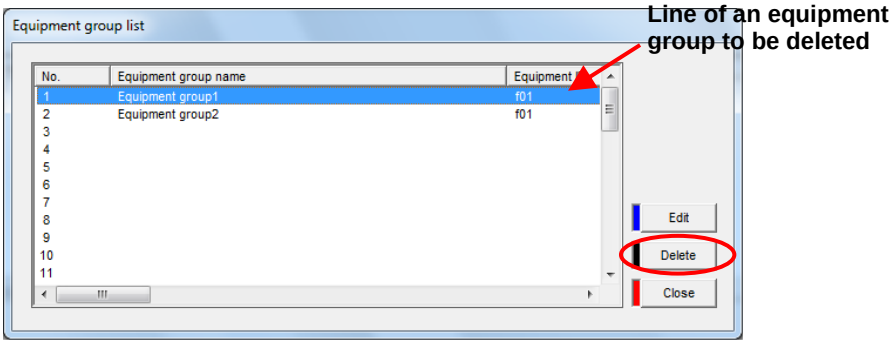
This section describes how to delete a registered equipment group.

1 Displaying the [Equipment group list] dialog box

Click the [Registration of equipment group] button in the dialog box of device list.

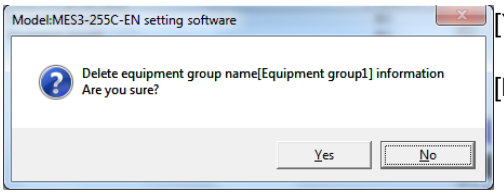
2 Selecting an equipment group you want to delete, and clicking the [Delete] button

Select a line of an equipment group you want to delete in the list in the [Equipment group list] dialog box, and then click the [Delete] button.



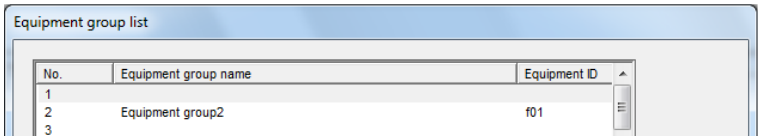
3 Deleting

The message confirming deletion is displayed. Click the button to execute deletion.



[Yes] button : Delete the equipment group and back to the [Equipment group list] dialog box.
[No] button : Cancel the deletion and back to the [Equipment group list] dialog box.

After the equipment group is deleted, its registration information is removed from the list in the [Equipment group list].



Remarks

- You can delete it using the [Delete] button on the [Registration of equipment group] dialog box.

Editing the registered information of a registered equipment group

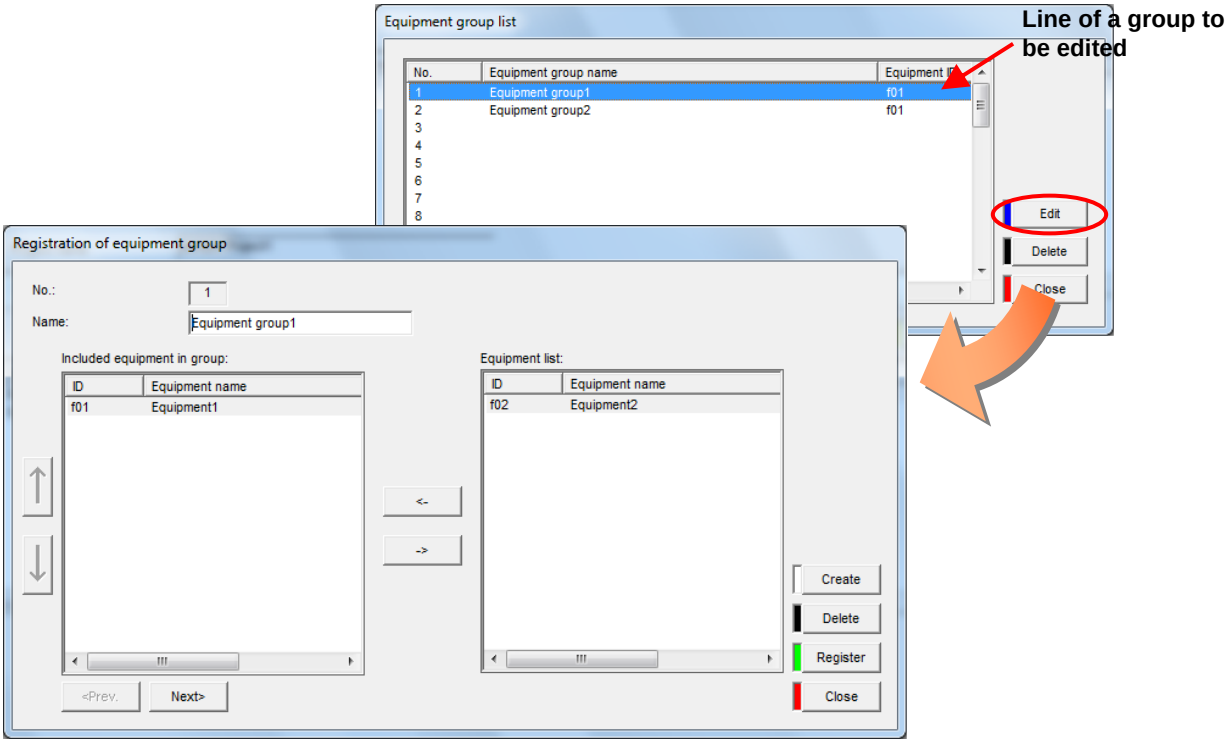
This section describes how to edit registration information of an equipment group.

1 Displaying the [Equipment group list] dialog box

Click the [Registration of equipment group] button in the dialog box of device list.

2 Selecting an equipment group you want to edit, and clicking the [Edit] button

Double-click a line of the equipment group you want to edit on the list in the [Equipment group list] dialog box, or Select a line of equipment group you want to edit, and then click the [Edit] button.



3 Editing the items to be changed and registering them

After editing the items to be changed, click the [Register] button.

* The entries and conditions for each item are similar to those at registering a new equipment group.

4.6. Project operation

This section explains the procedure to save the project created in "Basic settings" and "Advanced settings", and project writing, reading and checking on EcoWebServerIII.

4.6.1. Project saving

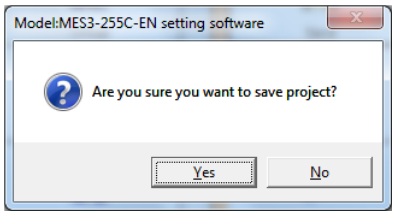
This section explains the operation procedure in [Save].

Saving the project

1 Saving

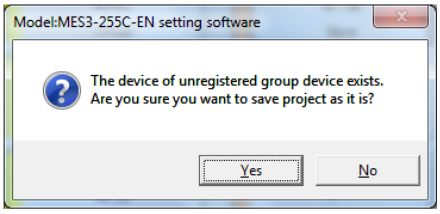
(1) Click the [Save] button in the dialog box of Project setting.

(2) The project saving message is displayed.

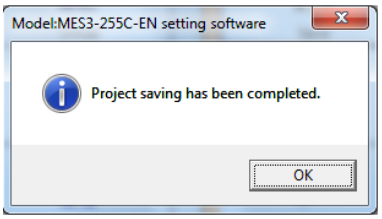


[Yes] button : To save the project
[No] button : To cancel saving

*1 If there remain the equipment not registered in the equipment group, the message shown on the right is displayed. Project saving can be completed, but project writing is disabled.
Make sure to register all the equipment in the equipment group.


Model:MES3-255C-EN setting software
The device of unregistered group device exists.
Are you sure you want to save project as it is?
Yes
No

(3) After saving is completed, the following message is displayed.



4.6.2. Project writing

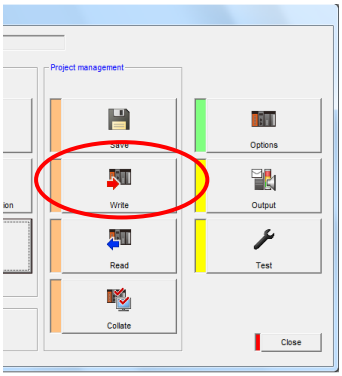
This section explains the operation procedure in the dialog box of [Write].

Writing the project via LAN

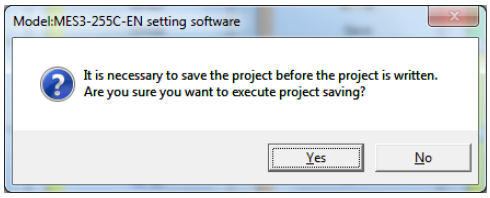
This section explains the procedure to write the set project in the CF card on EcoWebServerIII via LAN.

1 Displaying the dialog box of [Write]

(1) Click the [Write] button in the dialog box of Project setting.



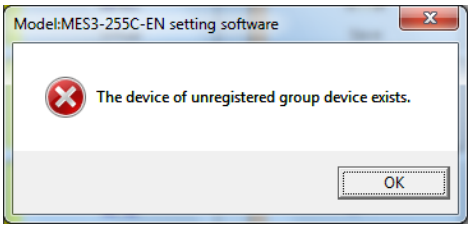
(2) The message confirming project saving is displayed.
The project must be saved before writing.


Model:MES3-255C-EN setting software
It is necessary to save the project before the project is written.
Are you sure you want to execute project saving?
Yes
No

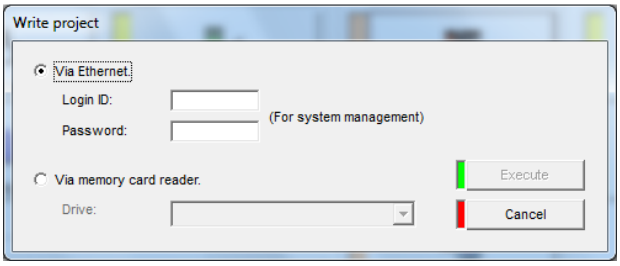
[Yes] button : To save the project and display the project confirmation dialog box.

[No] button : To cancel saving and writing

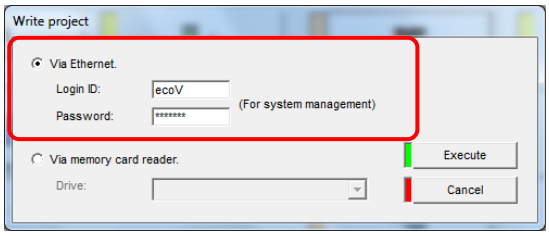
* If there remain the equipment not registered in the equipment group, the message shown below is displayed. Project saving can be completed, but project writing is disabled.
Make sure to register the equipment in the equipment group.
Execute writing after registering the all in each group.



(3) The dialog box of [Write project] is displayed.

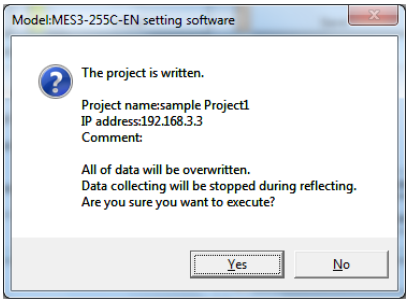


2 Inputting the login ID and password



Select the [Via Ethernet] radio button, and input the login ID and password for system administration in the [Login ID] and [Password] text boxes respectively.
(The default login ID and password are "ecoV" and "ecopass".)

3 Writing the project



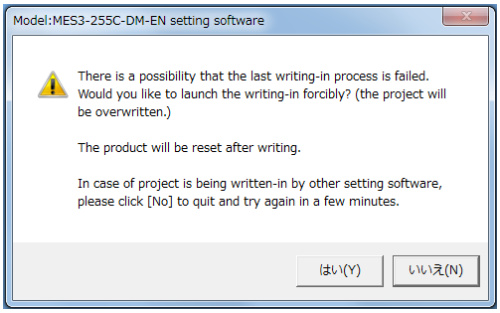
(1) By clicking the [Execute] button in the dialog box of [Write project], the writing confirmation message is displayed.

[Yes] button : To execute project writing
[No] button : To cancel project writing

*1 During writing project (during reflecting setting value), collection of the measuring point data will stop.

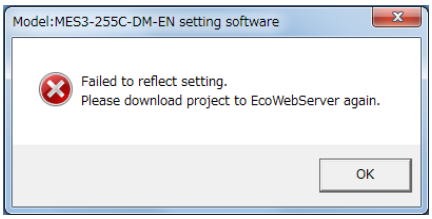
*2 In the following cases, need to reset the product after writing.
After the factory, when the project writing for the first time
When the station number information of CC-Link terminal is changed etc.
Reset confirmation message appears after writing.
[Yes] button: After writing of the project, run the reset.
[No] button: Stop the writing of the project.

*3 The message of right will be displayed when it was terminated by an error in the previous project writing process.


Model:MES3-255C-DM-EN setting software
There is a possibility that the last writing-in process is failed.
Would you like to launch the writing-in forcibly? (the project will be overwritten.)
The product will be reset after writing.
In case of project is being written-in by other setting software, please click [No] to quit and try again in a few minutes.
はい(Y)
いいえ(N)

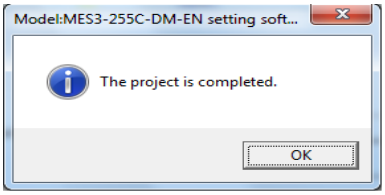
[No] button : To cancel project writing
[Yes] button : To execute project writing

When the writing of the project failed again, following message will display.



[OK]: To cancel project writing

(2) When writing and reset are completed, the following message is displayed.

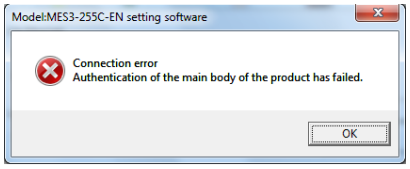


Caution

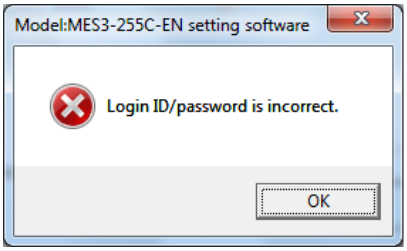
Do not execute project writing from the multiple client PCs concurrently. Otherwise, the writing may not be performed properly, and EcoWebServerIII may not be launched.

<For error message at the time of project writing >

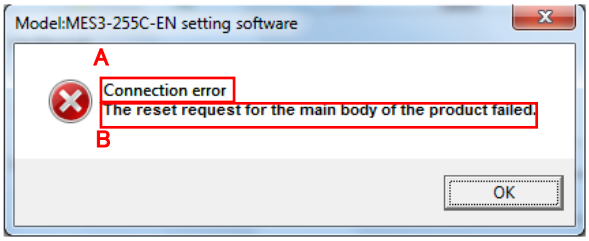
*1 If the IP address of EcoWebServerIII is incorrect, the LAN cable is not connected, or EcoWebServerIII is not powered on, the message on the right will be displayed.
Click the [OK] button and then check the IP address of EcoWebServerIII, the connection of the LAN cable, and whether the power is turned on.



*2 For a wrong login name or a wrong password, the message shown on the right is displayed.



*3 When it fails during the writing process of the project, an error message is displayed.
Message contents will vary depending on the occurrence factors and processing content. Refer to the table below.



A

To display the error factor	
Connection error	When there is no response from the EcoWebServerIII.
Timeout error	When timed out while communicating with the EcoWebServerIII.
Communication error	When there is error response from the EcoWebServerIII.

B To display the processing contents when error occurs

When many times fail to writing project, reset the product or write again later.

Remarks

- Project writing overwrites the existing project. Remember this.
- After completion of project writing, once close the Web browser and restart it.
  The changes may not be reflected in the displayed contents depending on the cache function of the browser.

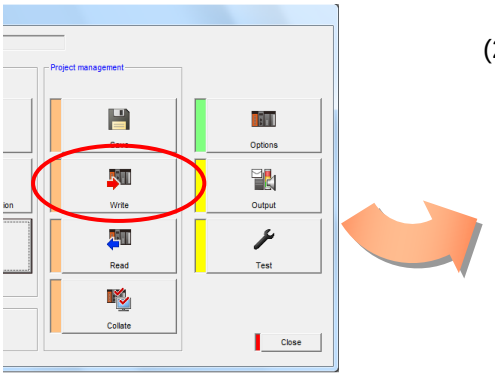
Writing the project via drive

This section explains the procedure to write the project in the CompactFlash card using the CompactFlash reader/writer, etc.

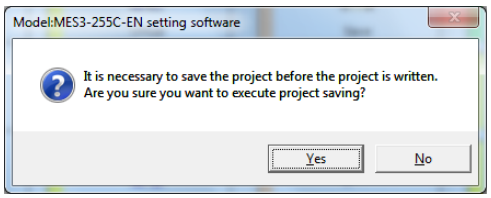
*** Power off EcoWebServerIII before inserting/removing the memory card.**

1 Displaying the dialog box of [Write]

(1) Click the [Write] button in the dialog box of Project setting.



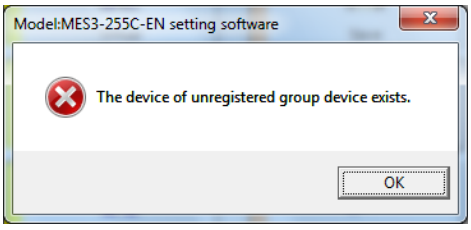
(2) The message confirming project saving is displayed.
The project must be saved before writing.


Model:MES3-255C-EN setting software
It is necessary to save the project before the project is written.
Are you sure you want to execute project saving?
Yes
No

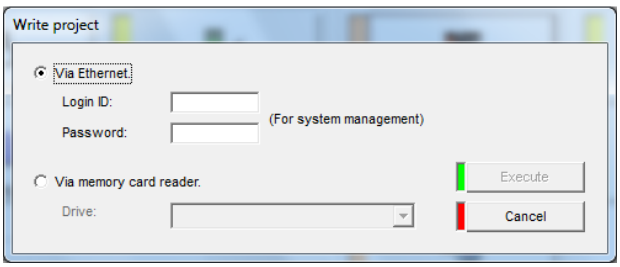
[Yes] button : To save the project and display the project confirmation dialog box.

[No] button : To cancel saving and writing

* If there remain the equipment not registered in the equipment group, the message shown below is displayed. Project saving can be completed, but project writing is disabled.
Make sure to register the equipment in the equipment group.
Execute writing after registering the all in each group.

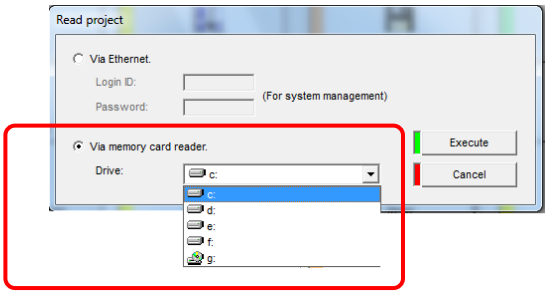


(2) The dialog box of [Write project] is displayed.



2 Specifying the drive

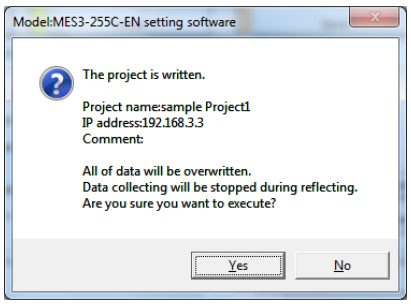
Select the [Via memory card reader] radio button, and select the drive where the memory card is mounted from the [Drive] pull-down list.



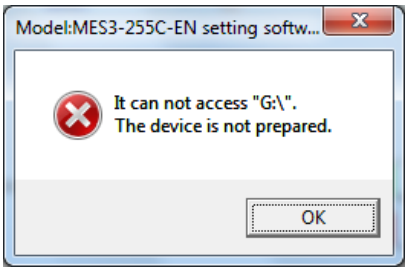
3 Writing the project

(1) By clicking the [Execute] button in the dialog box of [Write project], the writing confirmation message is displayed.

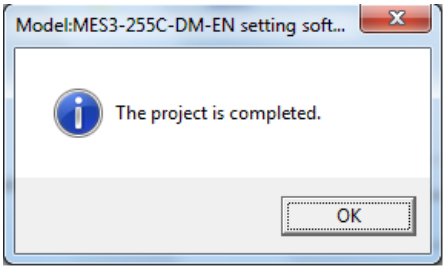
[Yes] button : To execute project writing
[No] button : To cancel project writing



*1 If the device status is not ready, the message shown on the right is displayed.
Click the [OK] button and confirm the device status.



(2) When writing is completed, the following message is displayed.



Remarks

- Project writing overwrites the existing project. Remember this.
- First, insert the CF card where the project is written, and then power on EcoWebServerIII.

4.6.3. Project reading

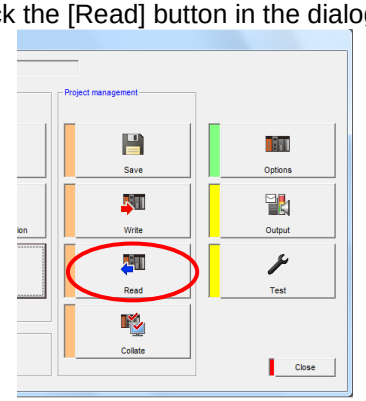
This section explains the operation procedure in the dialog box of [Read].

Reading the project via LAN

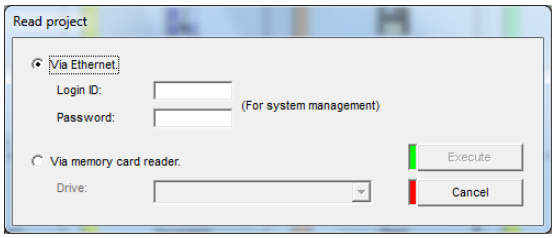
This section explains the procedure to read the project from EcoWebServerIII via LAN.

1 Displaying the dialog box of [Read project]

(1) Click the [Read] button in the dialog box of Project setting.

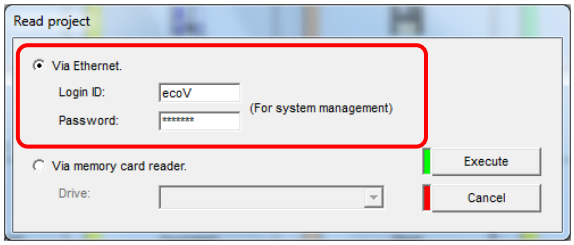


(2) The dialog box of [Read project] is displayed



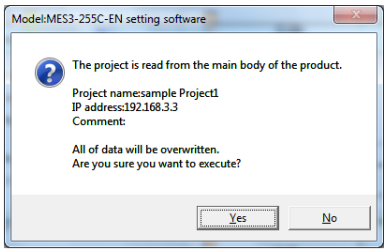
2 Inputting the login ID and password

Select the [Via Ethernet] radio button, and input the login ID and password for system administration in the [Login ID] and [Password] text boxes respectively.
(The default login ID and password are "ecoV" and "ecopass".)



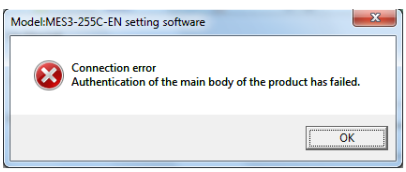
3 Reading the project

(1) By clicking the [Execute] button in the dialog box of [Read project], the reading confirmation message is displayed.

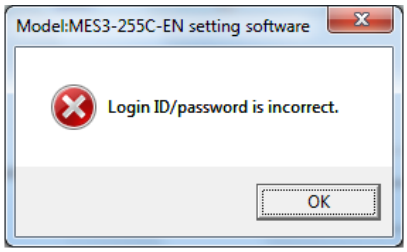


[Yes] button : To execute project reading
[No] button : To cancel project reading

*1 If the IP address of EcoWebServerIII is incorrect, the LAN cable is not connected, or EcoWebServerIII is not powered on, the message on the right will be displayed.
Click the [OK] button and then check the IP address of EcoWebServerIII, the connection of the LAN cable, and whether the power is turned on.



*2 For a wrong login ID or a wrong password, the message shown on the right is displayed.



Remarks

- Project reading overwrites the project that is being set now. Remember this.
- To read project continuously, be done after waiting for about 30 seconds.

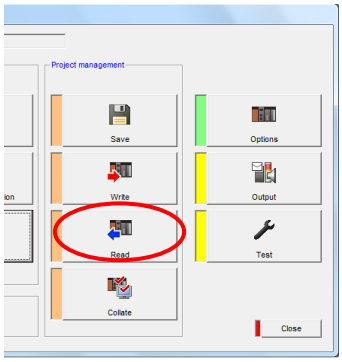
Reading the project via drive

This section explains the procedure to read the project from the CompactFlash card using the CompactFlash reader/writer, etc.

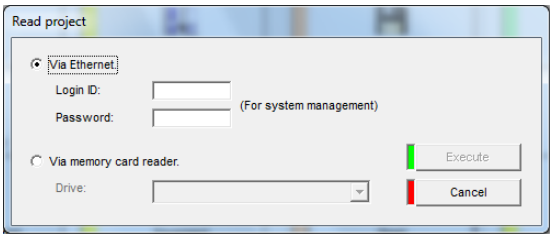
*** Power off EcoWebServerIII before inserting/removing the memory card.**

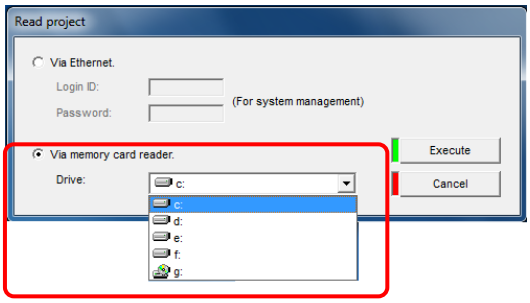
1 Displaying the dialog box of [Read project]

(1) Click the [Read] button in the dialog box of Project setting.



(2) The dialog box of [Read project] is displayed.





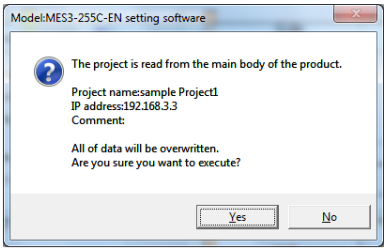
2 Specifying the drive

Select the [Via memory card reader] radio button, and select the drive where the memory card is mounted from the [Drive] pull-down list.

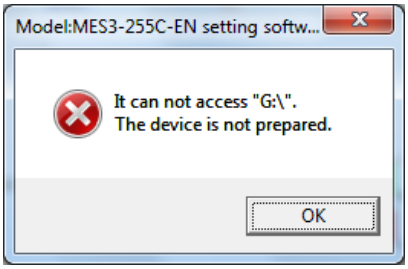
3 Reading the project

(1) By clicking the [Execute] button in the dialog box of [Read project], the reading confirmation message is displayed.

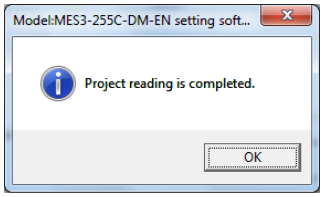
[Yes] button : To execute project reading
[No] button : To cancel project reading



* If the device status is not ready, the message shown on the right is displayed.
Click the [OK] button and confirm the device status.



(2) When reading is completed, the following message is displayed.



Remarks

- Project reading overwrites the project that is being set now. Remember this.

4.6.4. Collation of project

This section explains the operation procedure in the dialog box of [Collate].

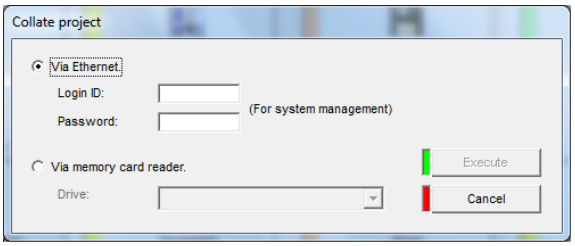
Checking the project via LAN

This section explains the procedure to check the project written in EcoWebServerIII and the project saved using this software via LAN.

1 Displaying the dialog box of [Collate]

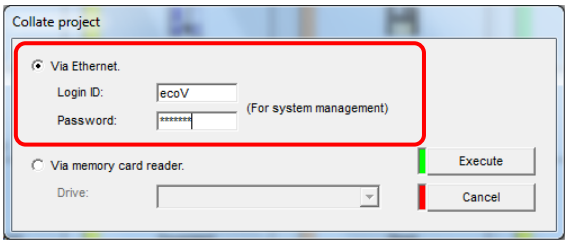
(1) Click the [Collate] button in the dialog box of Project setting.

(2) The dialog box of [Collate project] is displayed.



2 Inputting the login ID and password

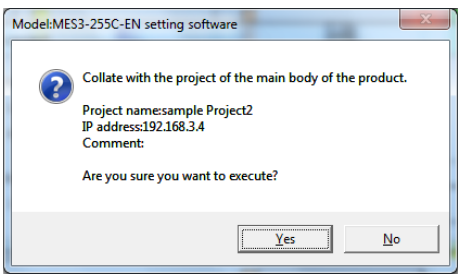
Select the [Via Ethernet] radio button, and input the login ID and password for system administration in the [Login ID] and [Password] text boxes respectively.
(The default login ID and password are "ecoV" and "ecopass".)



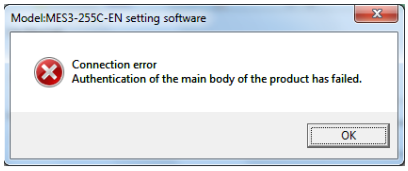
3 Checking the project

(1) When clicking the [Execute] button of the [Collate project] dialog box, the message is displayed to confirm checking.

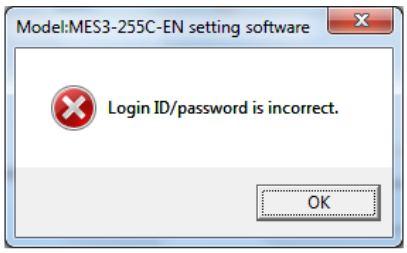
[Yes] button : To execute collation of project
[No] button : To cancel collation of project



*1 If the IP address of EcoWebServerIII is incorrect, the LAN cable is not connected, or EcoWebServerIII is not powered on, the message on the right will be displayed.
Click the [OK] button and then check the IP address of EcoWebServerIII, the connection of the LAN cable, and whether the power is turned on.

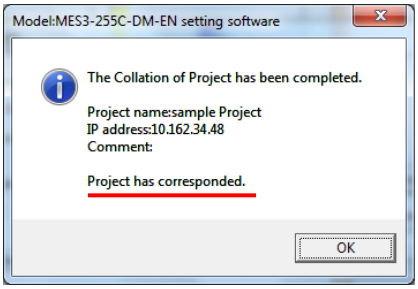


*2 For a wrong login name or a wrong password, the message shown on the right is displayed.

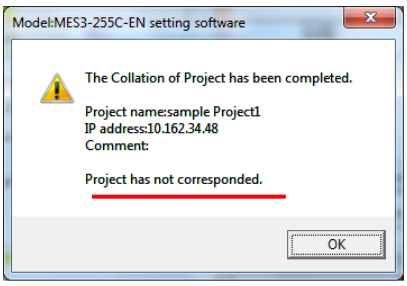


(2) After completion of checking, the checking result is displayed.

<If the projects match>



<If the projects do not match>



Remarks

- To read project continuously, be done after waiting for about 30 seconds.

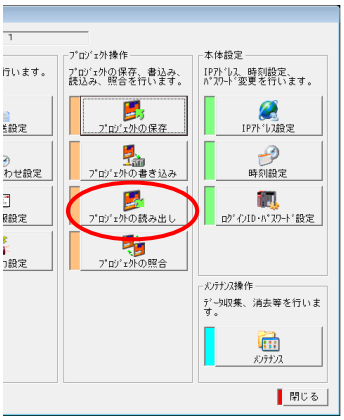
Checking the project via drive

This section explains the procedure to check a match between the project written in the CF card using the CompactFlash reader/writer and the project saved through this software.

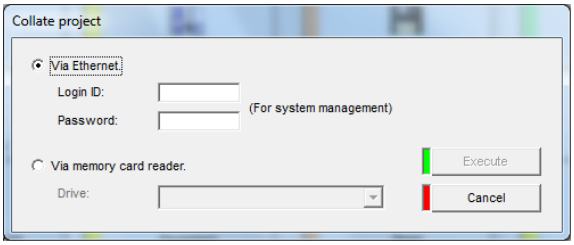
*** Power off EcoWebServerIII before inserting/removing the memory card.**

1 Displaying the dialog box of [Collate project]

(1) Click the [Collate] button in the dialog box of Project setting.

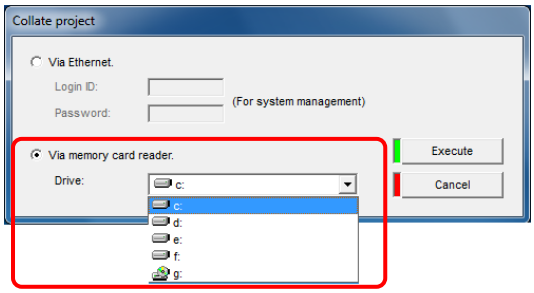


(2) The dialog box of [Collate project] is displayed.



2 Specifying the drive

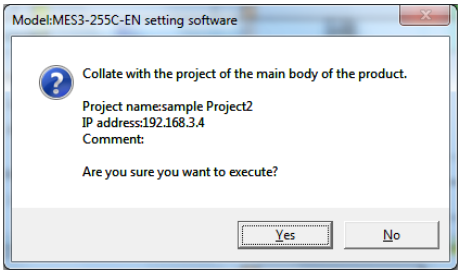
Select the [Via memory card reader] radio button, and select the drive where the memory card is mounted from the [Drive] pull-down list.



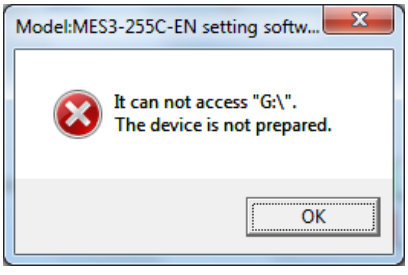
3 Checking the project

(1) When clicking the [Execute] button of the [Collate project] dialog box, the message is displayed to confirm checking.

[Yes] button : To execute collation of project
[No] button : To cancel collation of project

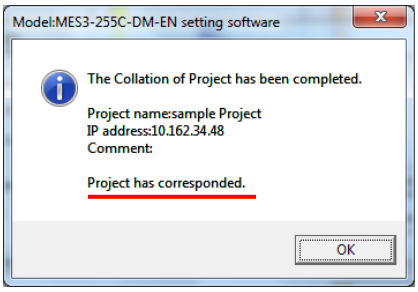


* If the device status is not ready, the message shown on the right is displayed.
Click the [OK] button and confirm the device status.

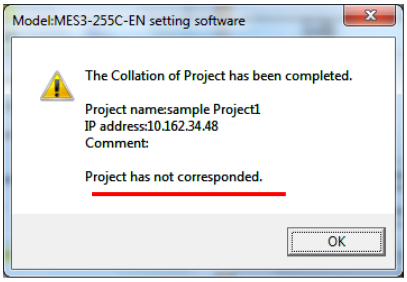


(2) After completion of checking, the checking result is displayed.

<If the projects match>



<If the projects do not match>

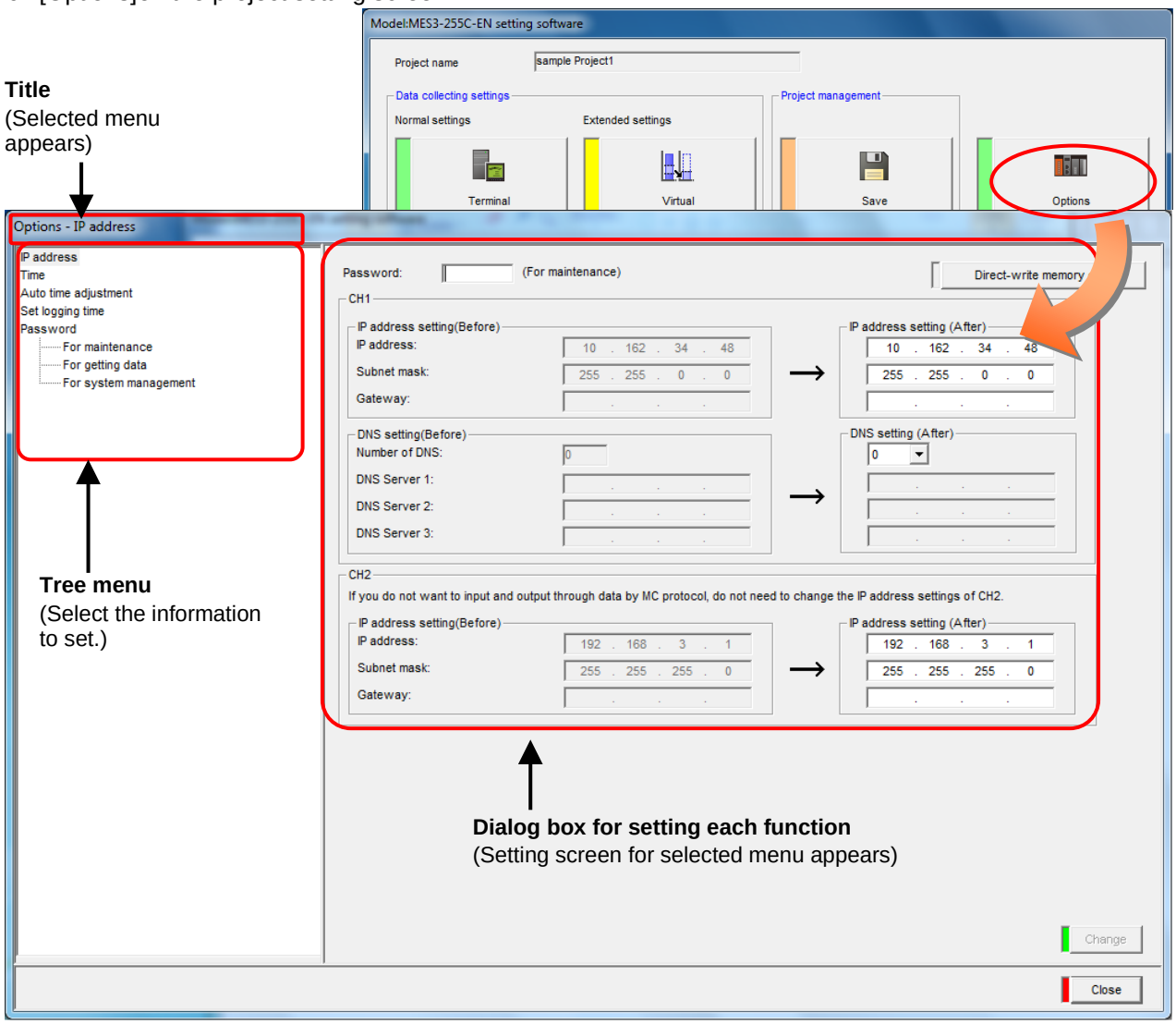


4.7. Options

This section describes the setting related to IP address change, clock setting, password change, etc.

1 Displaying the unit setting screen

Click [Options]on the project setting screen.

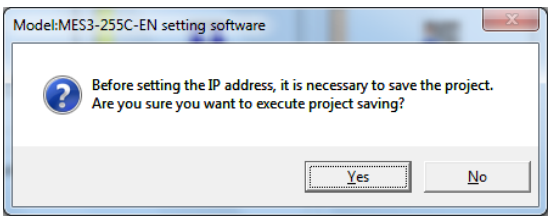


2 Selecting information to set from tree menu

[IP Address] is selected as the default.

Remarks

- The message shown on the right appears when the settings have been changed.
  When setting the IP address, click the [Yes] button and save the project.
- The Project setting screen appears when the [Close] button is clicked.


Model:MES3-255C-EN setting software
Before setting the IP address, it is necessary to save the project.
Are you sure you want to execute project saving?
Yes
No

4.7.1. IP address settings

The following describes the steps for operation in [IP Address].
Consult with the network administrator (the personnel who plans networks and administers IP addresses) before configuring the IP address.

Configuring the IP address

Configure the IP address of the main unit of EcoWebServerIII.
The following two IP addresses are set for EcoWebServerIII.
CH1: IP address for connecting personal computer and EcoWebServerIII
CH2: IP address for connecting PLC and EcoWebServerIII
(Setting not required if data will not be exchanged with PLC)

[*1] Connect a PC to which the setting software is installed to the main unit of EcoWebServerIII by using a LAN straight cable or crossover cable on a "1 to 1" basis.

1 Checking the IP address configured on the main unit of EcoWebServerIII

Power on EcoWebServerIII and check the IP address configured on the main unit.
(☞ Refer to **"Checking IP address"** in **Instruction Manual – Hardware**.)

(At the time of shipment) IP address : **192.168.10.1**
Subnet mask : **255.255.255.0**

2 Changing the IP address of the PC

To access EcoWebServerIII from the PC, change the IP address of the PC based on the IP address of EcoWebServerIII that was checked in **Step 1**.

***** If the network address portion of the IP address of the main unit of EcoWebServerIII (-> xxx.xxx.xxx.xxx) is the same as that of the PC, the IP address of the PC does not need to be changed.

(1) Take a note of the IP address that is configured on the PC.

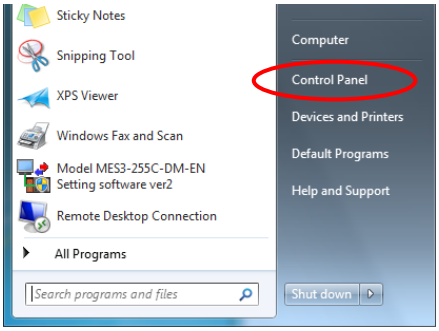
(Before change) IP address of the PC : . . .
(Before change) Subnet mask of the PC : . . .
(Before change) Default gateway : . . .

* Be sure to take a note in order to restore the IP address setting of the PC after the IP address of the main unit of EcoWebServerIII is changed.

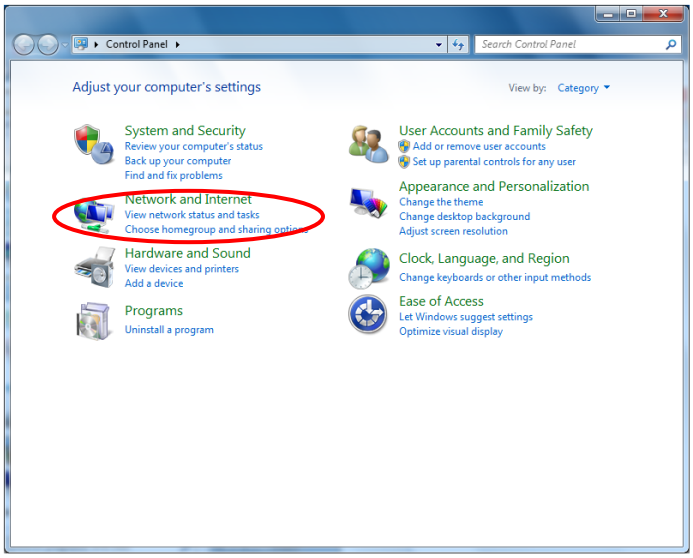
(2) Change the IP address of the PC.

<Procedures in Windows 7>

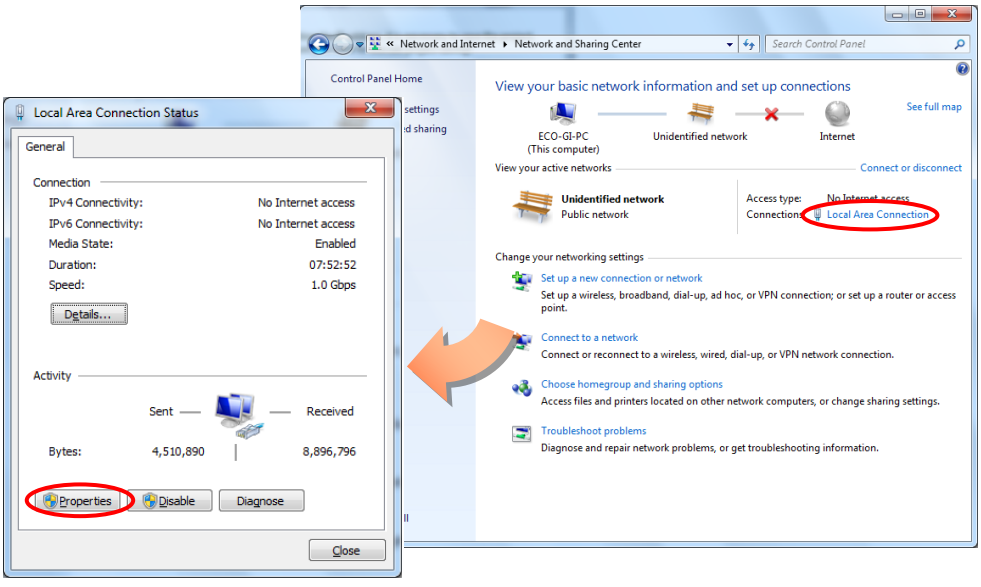
(1) Open the Control Panel of Windows.



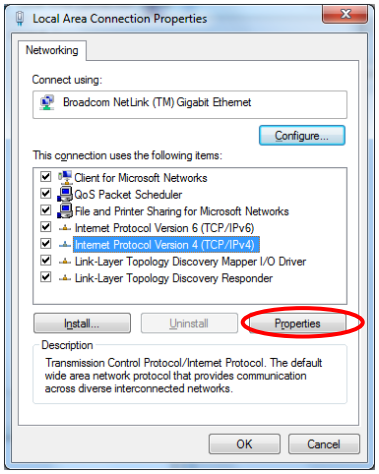
(2) Open [Network and Internet – View network status and tasks].



(3) Open [Local Area Connection] and then click [Properties].

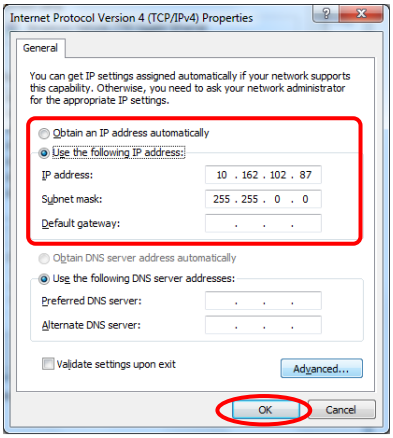


(4) Select [Internet Protocol Version 4 (TCP/IP)] and then click [Properties].



* Add [Internet Protocol (TCP/IP)] if it is not registered.
For information on how to add the setting, refer to the instruction manual etc. included with the OS.

(5) Select [Use the following IP address] and then type the settings in [IP address] and [Subnet mask]. (Decimal number)


Internet Protocol Version 4 (TCP/IPv4) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address: 10 . 162 . 102 . 87
Subnet mask: 255 . 255 . 0 . 0
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Validate settings upon exit
Advanced...
OK
Cancel

The network portion (*1) of the IP address must be the same as that of the main unit of EcoWebServerIII.
The host address portion (*1) of the IP address must be different from that of the main unit of EcoWebServerIII.
Note that [0] and [255] cannot be set.

*1 The network address portion of the IP address is the section that corresponds to the bits 1 in the subnet mask.
The host address portion of the IP address is the section that corresponds to the bits 0 in the subnet mask.

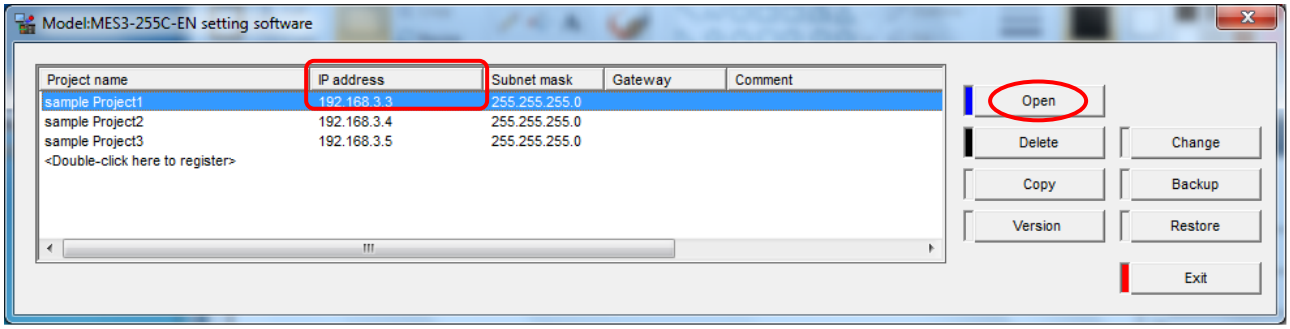
(Example)

	Network address portion			Host address portion
IP address	192.	168.	10.	10
Subnet mask (decimal number)	255.	255.	255.	0
Subnet mask (binary number)	11111111.	11111111.	11111111.	00000000

(6) When the entry is completed, click the [OK] button.
The network information will be automatically updated. Follow the Windows messages.
When the message for rebooting the PC is displayed, reboot the PC.

3 Opening a project

Start up the setting software, **select a project with the same IP address setting as that of the main unit of EcoWebServerIII**, and click the [Open] button.



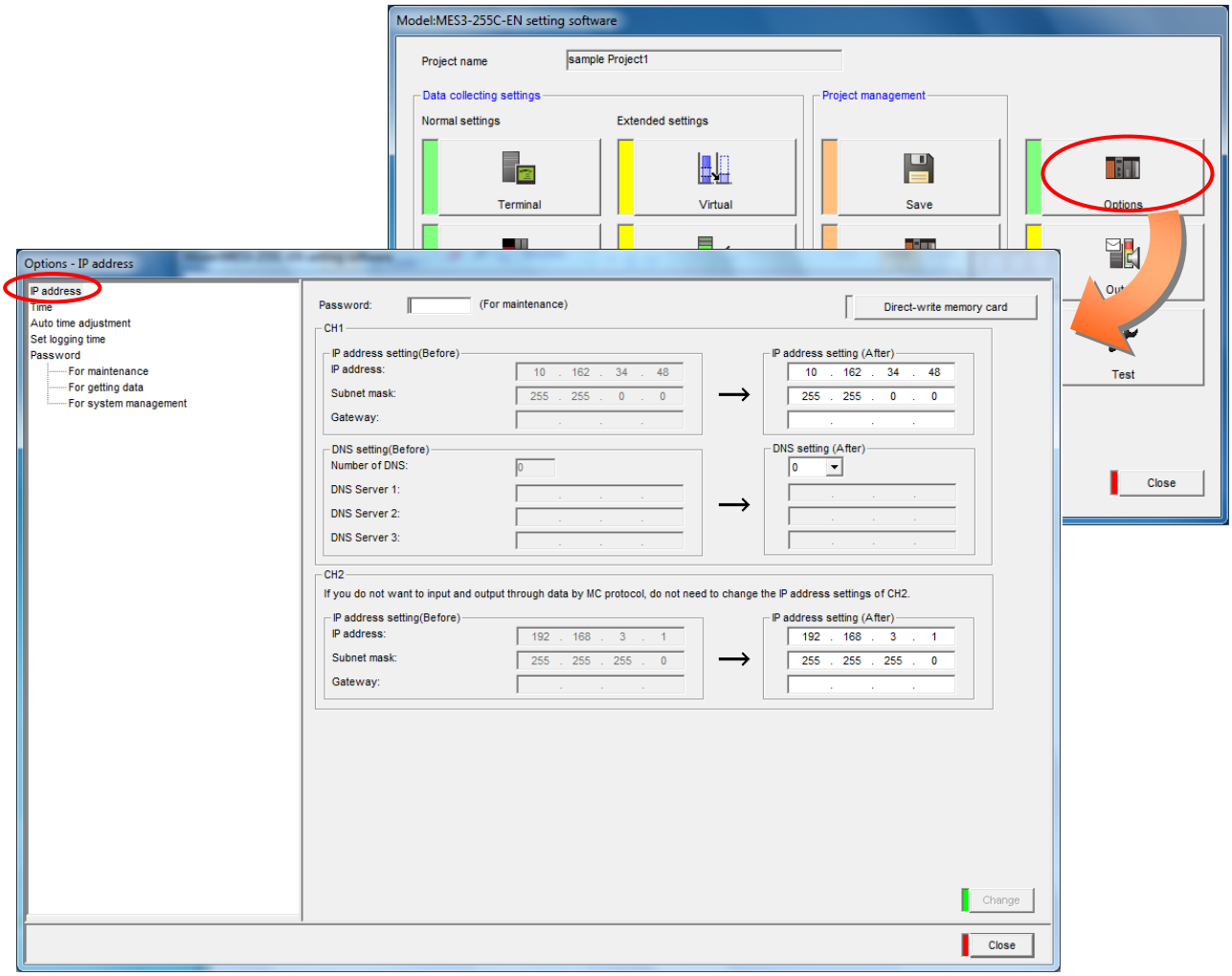
Remarks

- What if the project cannot be found?
  Create project with the same IP address setting as that of the main unit of EcoWebServerIII.
  （☞ Refer to **4.2.1 Project management, Registering a new project**」）

  What if the IP address of the registered project is different from that of EcoWebServerIII?
  Change the IP address of the project to the same IP address as the one which is configured on the main unit of EcoWebServerIII.
  （☞ Refer to **4.2.4 Project management, Modifying the project information**）

4 Displaying the [IP address] screen

Click [Options] on the project setting screen.



5 Inputting the maintenance password

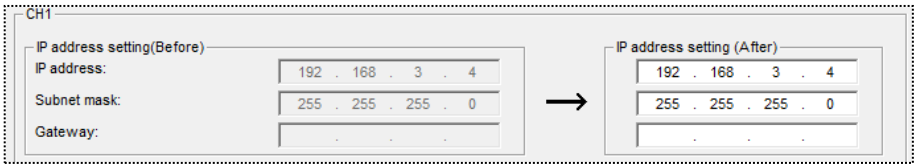
Type in the maintenance password.

(The default maintenance password is "ecopass".)

6 Inputting the IP address and subnet mask that you want to configure on EcoWebServerIII

(1) Set the IP address for connecting the PC and EcoWebServerIII.

Type the IP address and subnet mask that you want to set in the CH1 IP address setting (after change) field.


CH1
IP address setting(Before)
IP address:
192 . 168 . 3 . 4
Subnet mask:
255 . 255 . 255 . 0
Gateway:
IP address setting (After)
192 . 168 . 3 . 4
255 . 255 . 255 . 0

[IP address (after change)]

[IP address] : Type in a new IP address.
[Subnet mask] : Type in a new subnet mask.
[Gateway] : Type in a new gateway address.

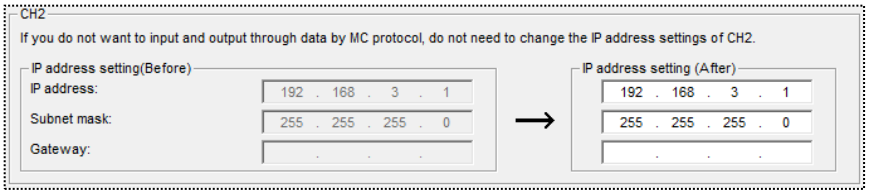
After the entry, the [Change] button becomes enabled.

<table>
<tr><td>[IP address]</td><td colspan="2">[Range of configurable IP address]
<table><tr><td>1.0.0.0～126.255.255.255</td></tr><tr><td>128.0.0.0～191.255.255.255</td></tr><tr><td>192.0.0.0～223.255.255.255</td></tr></table>*1 The following IP addresses cannot be configured.
• “0.0.0.0”, “xxx.xxx.xxx.255” (xxx are any values)
• The same IP address as that of the client PC
*2 The same IP address as the one for other projects can be registered.</td></tr>
<tr><td>[Subnet mask]</td><td>[Setting conditions]
• The value “1” continues from the most significant bit.
• No 0 is inserted between the 1s.
• The least significant bit is “0.”</td><td>(Example)
255. 255. 0. 0
(11111111. 11111111. 00000000. 00000000
(Binary number))</td></tr>
<tr><td>[Gateway]</td><td colspan="2">*1 The following IP addresses cannot be configured.
“0.0.0.0”, “xxx.xxx.xxx.255” (xxx are any values)
*2 This item is optional. Configure it only when necessary.</td></tr>
</table>

*3 The DNS server can be configured at the same time. To set the DNS server, enter the setting in [DNS setting (After)]. (Refer to **4.7.1 IP address settings, Configuring DNS servers**.)

(2) Set the IP address for connecting the PLC and EcoWebServerIII. This setting is not required if data will not be exchanged with the PLC via the MC protocol.

Type the IP address and subnet mask you want to set in the CH2 IP address setting (After) field.


CH2
If you do not want to input and output through data by MC protocol, do not need to change the IP address settings of CH2.
IP address setting(Before)
IP address:
192 . 168 . 3 . 1
Subnet mask:
255 . 255 . 255 . 0
Gateway:
IP address setting (After)
192 . 168 . 3 . 1
255 . 255 . 255 . 0

[IP address setting (After)]

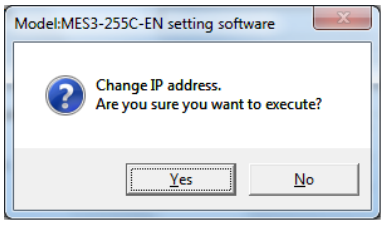
[IP address] : Type in a new IP address.
[Subnet mask] : Type in a new subnet mask.
[Gateway] : Type in a new gateway address.

The input range is the same as CH1.

* A network address section IP address that is the same as CH1 cannot be entered.

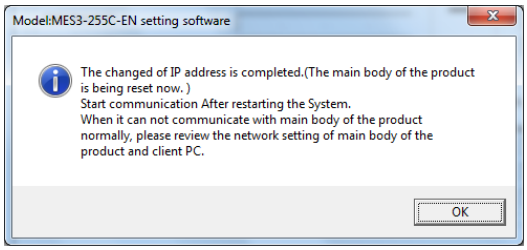
7 Changing

When you click the [Change] button, the message for confirming the change will be displayed.



[Yes] button : Executes the IP address setting.
[No] button : Cancels the IP address setting.

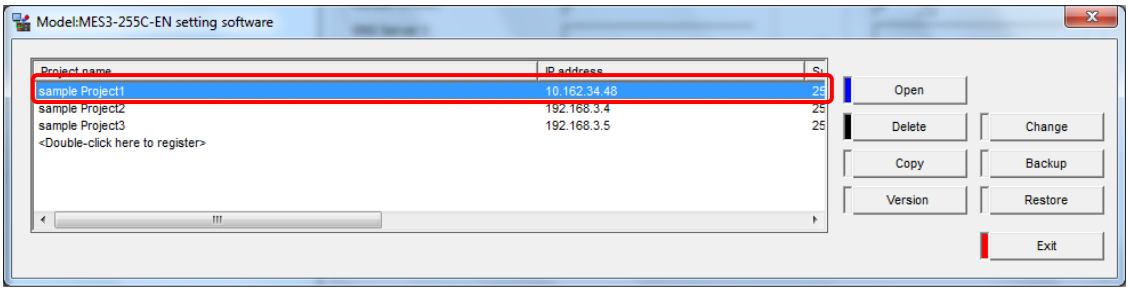
When the change is completed, the following message will be displayed. Click the [OK] button.


Model:MES3-255C-EN setting software
The changed of IP address is completed.(The main body of the product is being reset now.)
Start communication After restarting the System.
When it can not communicate with main body of the product normally, please review the network setting of main body of the product and client PC.
OK

*1 After the IP address setting is changed, EcoWebServerIII will be automatically reset. (After the reset is completed, the change of the IP address will be effective.)

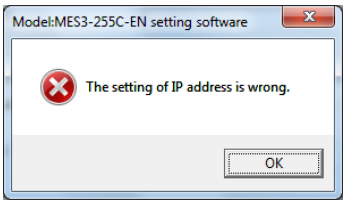
*2 A reset takes 1 to 8 minutes. Wait until the reset is completed and the [STA.] LED on the main unit of EcoWebServerIII comes on before executing communication.

*3 The values of [IP address], [Subnet mask], and [Gateway] in the project information will also be updated automatically to the new values.



*4 If the set values of [IP address], [Subnet mask], or [Gateway] are incorrect, a message as shown to the right will be displayed. Review the values.

(Example of display)



8 Restoring the IP address settings of the PC

If the network address portion of the IP address of the main unit of EcoWebServerIII has been changed, the setting on the PC side needs to be revised. (Because communication requires that the network address portions be the same.)

If the IP address of the PC has been changed to change the IP address of the main unit of EcoWebServerIII, restore the original IP address setting.
Restore the original setting by following the same step as Step **2**.

Remarks

How can I check that the IP address has been changed correctly?
Check it in the following ways.

(1) Execute the [Get time information].
⇒ If the IP address is configured correctly, the date and time that are set to the main unit of EcoWebServerIII can be read out.
(Refer to 4.7.2 Setting of the time)

(2) Check the configured IP address by using the 7-segment LEDs on the main unit.
(Refer to "Checking IP address" in Instruction Manual – Hardware.)

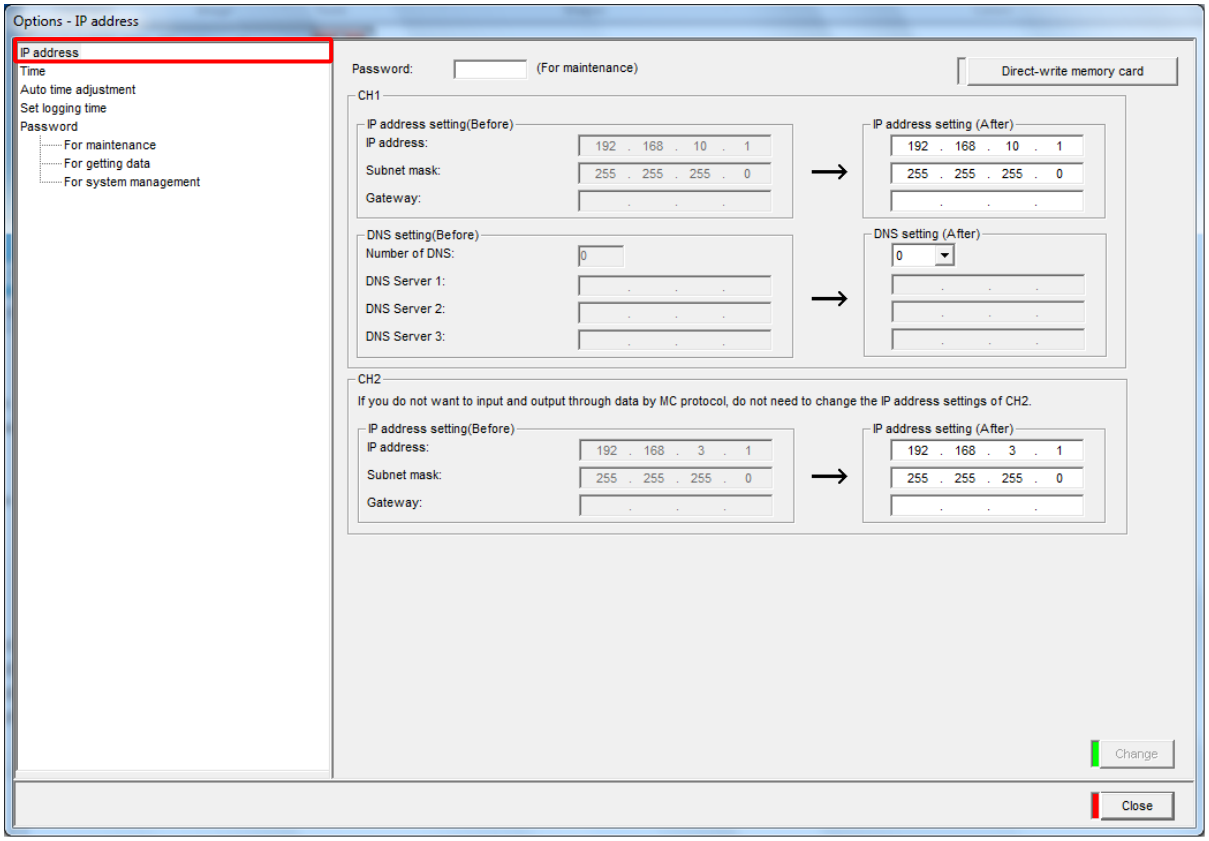
* If communication cannot be executed even when the IP address of EcoWebServerIII has been changed correctly, review the IP address setting of the client PC again.

Configuring DNS servers

The following describes the steps for configuring DNS servers.
When specifying a SMTP server, FTP server, or SNTP server by "domain name" to configure a monitoring and notification settings, file transfer setting, or automatic time setting, a DNS server needs to be configured.

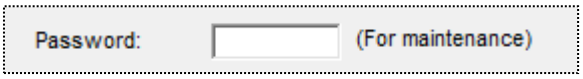
1 Displaying the [IP address] screen

Click the [IP address] in the tree menu on the [Options] screen.



2 Inputting the maintenance password

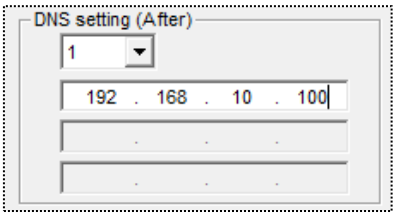
Type in the maintenance password.



(The default maintenance password is **"ecopass"**.)

3 Inputting DNS server settings

Select or type in the following items.



[DNS setting (After)]

[Number of DNS] : Select from [0] to [3].
[DNS server 1] to [DNS server 3] : Type in the IP addresses of the DNS servers. **(*1)**

After the entry, the [Change] button becomes enabled.

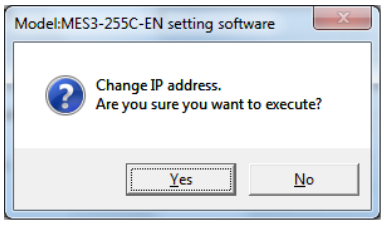
*1 The input conditions for [DNS setting (after)] are as follows.

[DNS server 1] ~ [DNS server 3]	The following IP addresses cannot be configured. "0.0.0.0", "xxx.xxx.xxx.255" (xxx are any values)

*2 The IP address of the main unit of EcoWebServerIII can also be configured at the same time.
(☞Refer to **4.7.1 IP address settings**.)

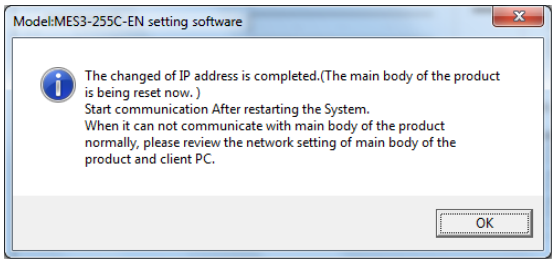
4 Changing DNS server settings

When you click the [Change] button, the message for confirming the change will be displayed.



[Yes] button : Executes the IP address setting (DNS server setting).
[No] button : Cancels the IP address setting (DNS server setting).

When the change is completed, the following message will be displayed. Click the [OK] button.


Model:MES3-255C-EN setting software
The changed of IP address is completed.(The main body of the product is being reset now.)
Start communication After restarting the System.
When it can not communicate with main body of the product normally, please review the network setting of main body of the product and client PC.
OK

*1 After the IP address setting (DNS server setting) is changed, EcoWebServerIII will be automatically reset. (After the reset is completed, the change will be effective.)

*2 **A reset takes 1 to 8 minutes. Wait until the reset is completed and the [STA.] LED on the main unit of EcoWebServerIII comes on before executing communication.**

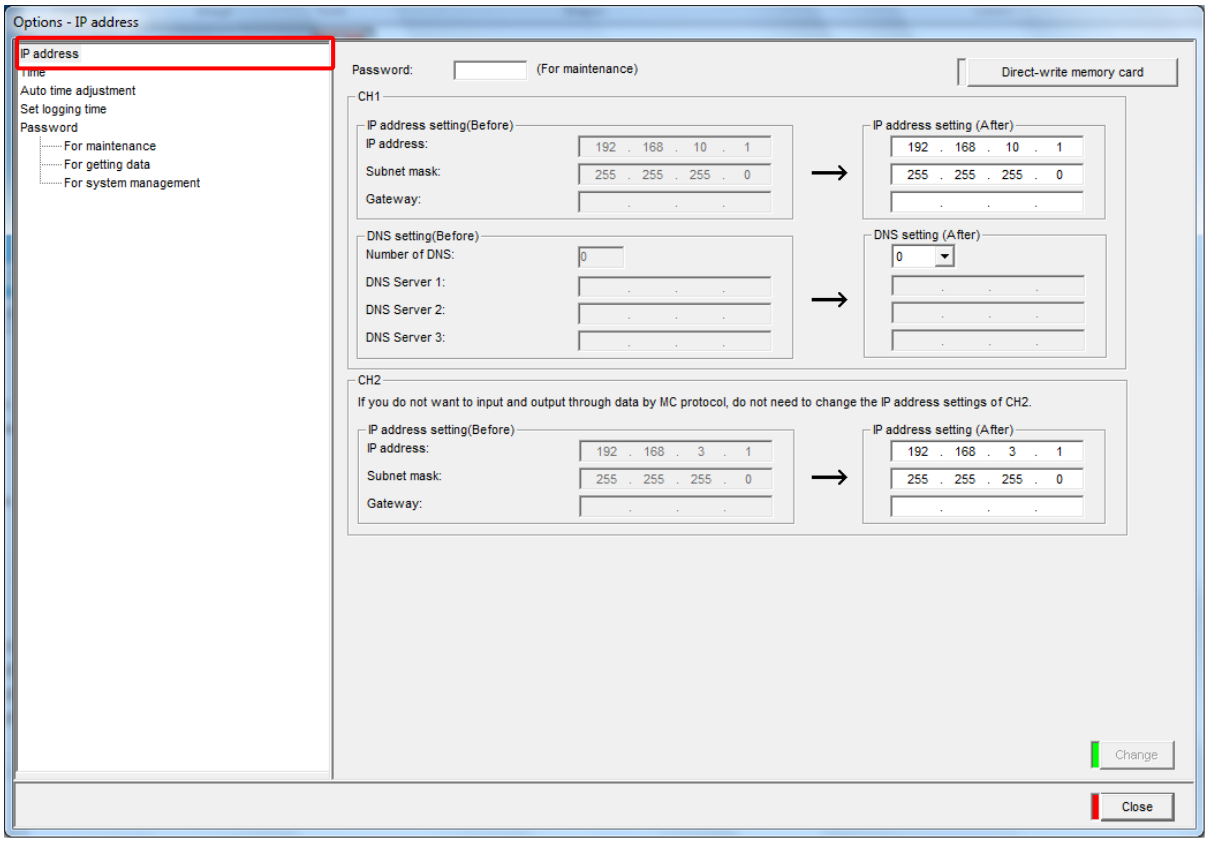
Writing the IP address settings via drive

This section explains the procedures to write the IP address settings in the CompactFlash card using Compact Flash reader/writer.

*** Power off EcoWebServerIII before inserting/removing the memory card.**

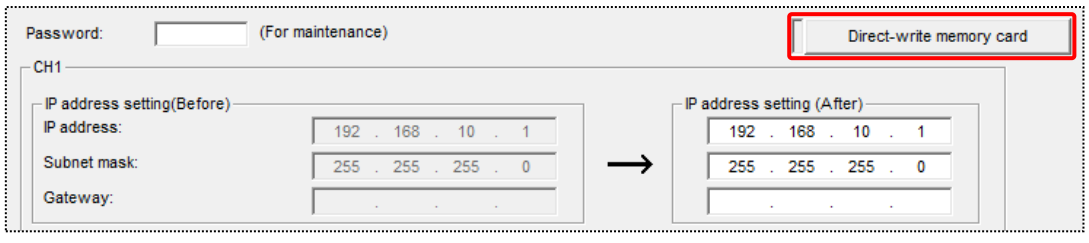
1 Displaying the [IP address] screen

Click [IP address] in the tree menu on the unit setting screen.



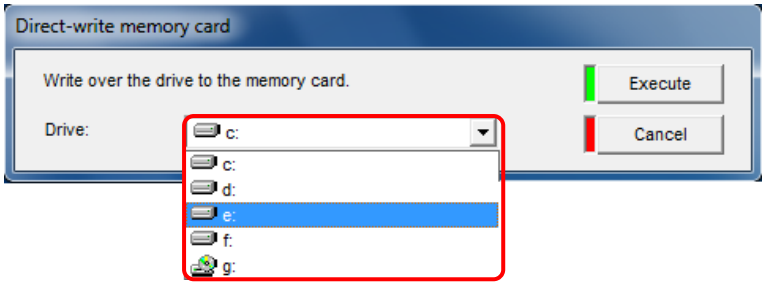
2 Typing the IP address and subnet mask you want to set in the EcoWebServerIII

Type in the IP address and subnet mask you want to set in the EcoWebServerIII and click the [Direct-write memory card] button.
(Refer to **4.8.1 IP address settings**.)



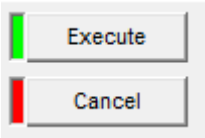
3 Specifying the drive

Select the drive where the memory card is mounted from the [Drive] pull-down list.



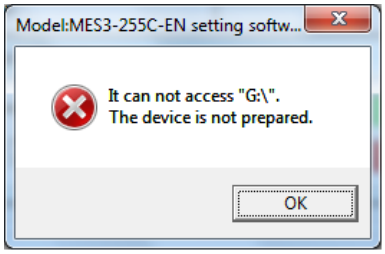
4 Writing the IP address settings

(1) Click the [Execute] button on the [Direct write memory card] screen, and write in the IP address settings.

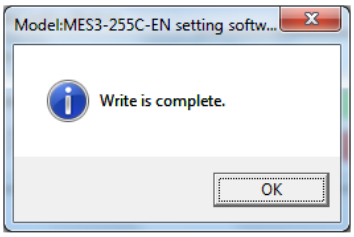


[Execute] : Write the IP address settings.
[Cancel] : Back to the [IP address]

* If the device status is not ready, the message shown on the right is displayed.
Click the [OK] button and confirm the device status.



(2) When writing is completed, the following message is displayed.



Remarks

- First, insert the CF card where the IP address settings are written, and then power on the EcoWebServerIII.

4.7.2. Setting of the time

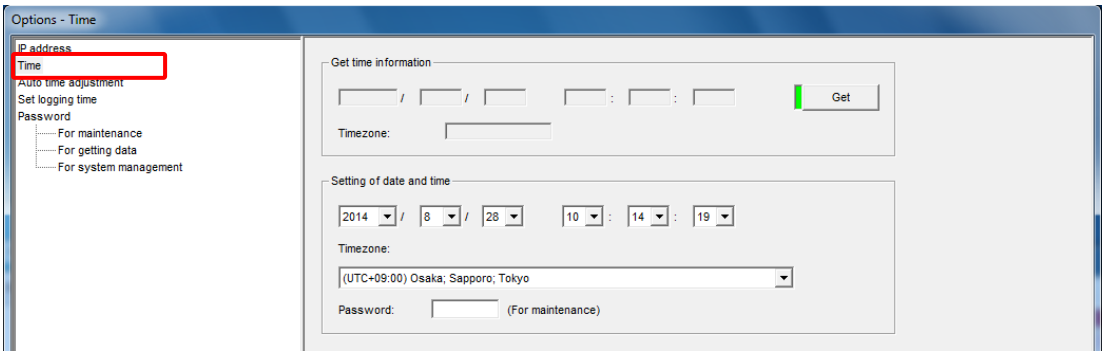
The following describes the steps for operation in [Time].

Reading out the date and time

The following describes the steps for reading out the time that is set to the main unit of EcoWebServerIII.

1 Displaying the [Time] screen

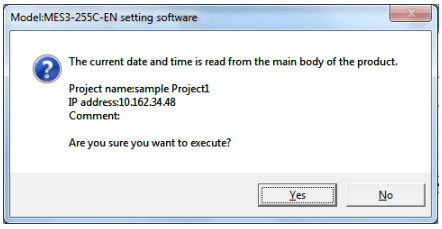
Click [Time] button in the tree menu on the unit setting screen.



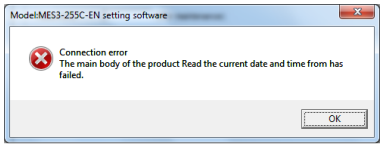
2 Reading out the time from the main unit of EcoWebServerIII

When you click the [Get] button on the [Time] screen, the message for confirming the readout of the time will be displayed.

[Yes] : Executes the readout of the time.
[No] : Cancels the readout of the time.

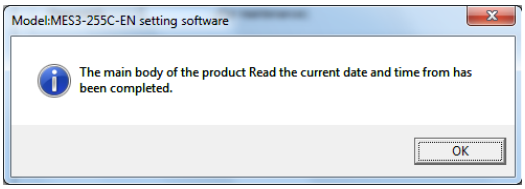

Model:MES3-255C-EN setting software
The current date and time is read from the main body of the product.
Project name:sample Project1
IP address:10.162.34.48
Comment:
Are you sure you want to execute?
Yes
No

* If the IP address of EcoWebServerIII is incorrect, the LAN cable is not connected, or EcoWebServerIII is not powered on, the message on the right will be displayed.
Click the [OK] button and then check the IP address of EcoWebServerIII, the connection of the LAN cable, and whether the power is turned on.


Model:MES3-255C-EN setting software
Connection error
The main body of the product Read the current date and time from has failed.
OK

When the readout is completed, the following message will be displayed.

Click the [OK] button to display the read-out time.

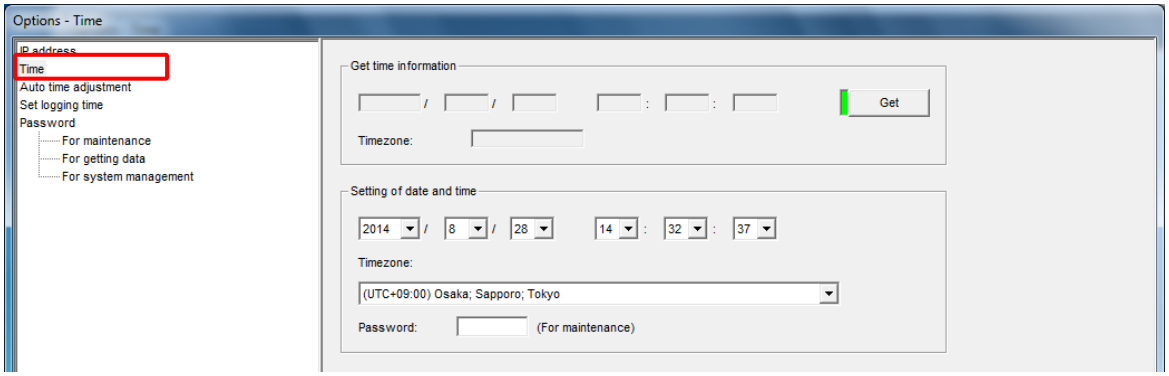

Model:MES3-255C-EN setting software
The main body of the product Read the current date and time from has been completed.
OK

Setting the date and time

The following describes the steps for setting the time to the main unit of EcoWebServerIII.

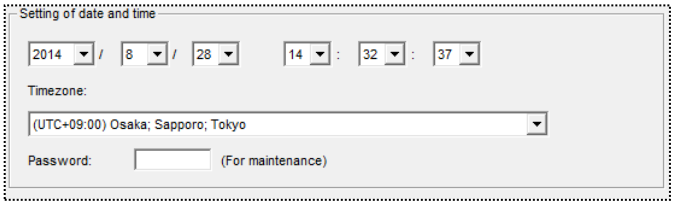
1 Displaying the [Time] screen

Click [Time] in the tree menu on the unit setting screen.



2 Selecting and inputting the date and time settings

Set the following items.



[Setting the date and time]

[Year], [Month], [Day], [Hour], [Minute], [Second]: Use the [▼] buttons to set the date and time.

- Allowable setting range

  00:00:00 on January 1, 2012 to 23:59:59 on December 31, 2099

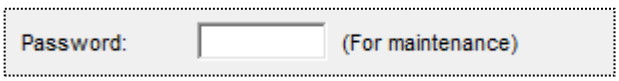
  * The default value is the current time of the PC when the [Time] screen was opened.

[Time zone]

When using in Japan, this can be left set to "(UTC+09:00) Osaka, Sapporo, Tokyo". Set according to your time zone.

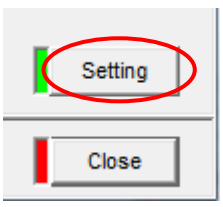
3 Inputting the maintenance password

Type in the maintenance password.



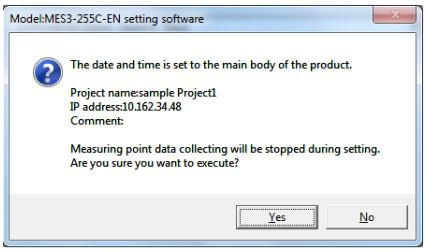
(The default maintenance password is “ecopass”.)

After the entry, the [Setting] button becomes enabled.



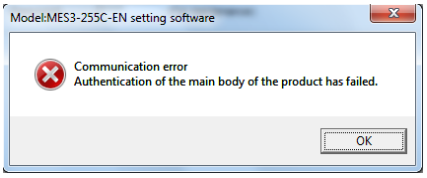
4 Changing

(1) When you click the [Setting] button, the confirmation message will be displayed.


Model:MES3-255C-EN setting software
The date and time is set to the main body of the product.
Project name:sample Project1
IP address:10.162.34.48
Comment:
Measuring point data collecting will be stopped during setting.
Are you sure you want to execute?
Yes
No

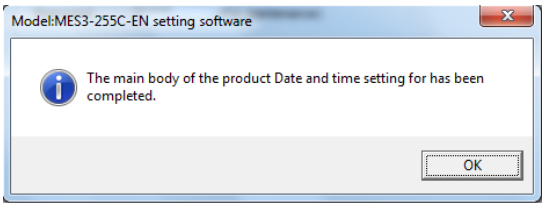
[Yes] button : To execute date and time setting
[No] button : To cancel date and time setting

*1 If the IP address of EcoWebServerIII is incorrect, the LAN cable is not connected, or EcoWebServerIII is not powered on, the message on the right will be displayed.
Click the [OK] button and then check the IP address of EcoWebServerIII, the connection of the LAN cable, and whether the power is turned on.



*2 If the password is incorrect, the message on the right will be displayed.

(2) When the setting of the date and time is completed, the following message will be displayed.



4.7.3. Auto time settings

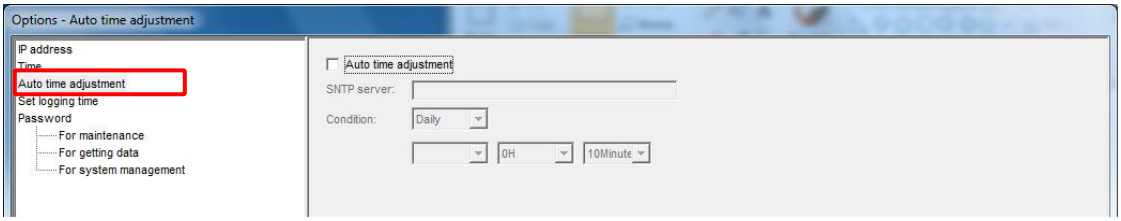
This section explains the operation procedure in the dialog box of [Auto time adjustment].
Set up the SNTP server that serves synchronization and its synchronization cycle.

***When setting the time to the business meter, do not set the automatic time setting function.**
*** For installing and setting the SNTP (standard time) server and inquiring technical questions about it, consult with your network administrator (or an applicable department of your company).**

Configuring auto time settings

1 Displaying the [Auto time adjustment] dialog box

Click the [Auto time adjustment] in the tree menu on the unit setting dialog box.



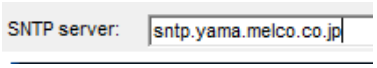
2 Checking the [Auto time adjustment] check box.

If the [Auto time adjustment] check box is checked, the [SNTP server] and [Condition] areas become active.

3 Specifying the SNTP server

Input a domain name or IP address of the SNTP (standard time) server from the keyboard.

- For inputting a domain name



Characters:	Up to 50 characters
Prohibited characters:	The following characters cannot be registered: # ¥ / : , ; * ? " < > |

* Setting of the DNS server is required.

- For inputting an IP address

Input range:	0 to 255
Values prohibited to register:	0.0.0.0, xxx.xxx.xxx.255 (xxx: any numerical value)

Remarks

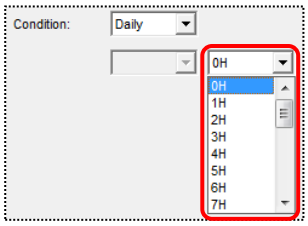
- When designating the SNTP server by domain name, make sure to set up the DNS server. (Refer to **4.7.1 IP address settings, Configuring DNS servers**.)

*** For installing and setting the DNS server (name server) and inquiring technical questions about it, consult with your network administrator (or an applicable department of your company).**

- When re-setting the SNTP (standard time) server after auto time setting error occurs, reset the EcoWebServerIII.

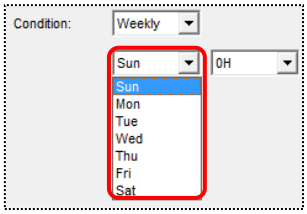
4 Configuring auto time setting cycle

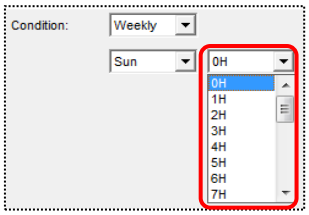
Set the cycle to perform auto time set.



- **For daily**: Select the time.

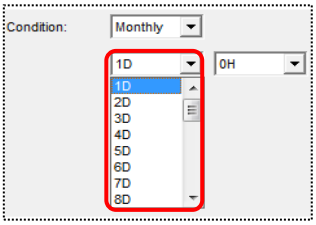
  [Time]
  Selection range: [0H] to [23H]
  Default value: [0H]

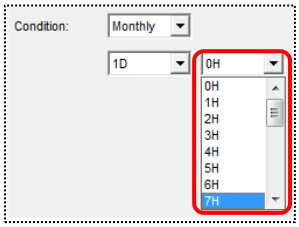




- **For weekly**: Select a day of the week and the time.

  [Day of the week]
  Selection range: [Sun] to [Sat]
  Default value: [Sun]
  [Time]
  Selection range: [0H] to [23H]
  Default value: [0H]





- **For monthly**: Select a date and the time.

  [Date]
  Selection range: [1D] to [28D]
  Default value: [1D]
  [Time]
  Selection range: [0H] to [23H]
  Default value: [0H]

5 Registering

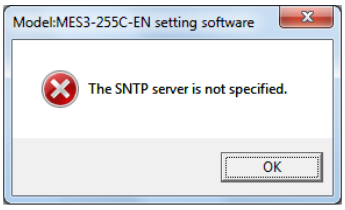
Click the button in the [Auto time adjustment] dialog box to register.

[Register] button : Register the auto time setting as configured.

[Close] button : Back to the Project setting dialog box.

*1 If the set details are not proper, an error message as shown on the right is displayed when clicking the [Register] button according to the error details. Reset the details so as to meet the conditions of each item.

(Example of display)

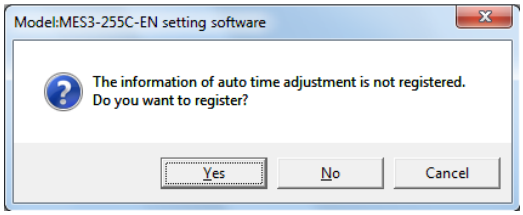


*2 After modification of entry details of each item, click the [Close] button instead of clicking the [Register] button, the message shown on the right is displayed.

[Yes] button : To register

[No] button : Not to register.

[Cancel] button : To go back to the [Auto time adjustment] dialog box



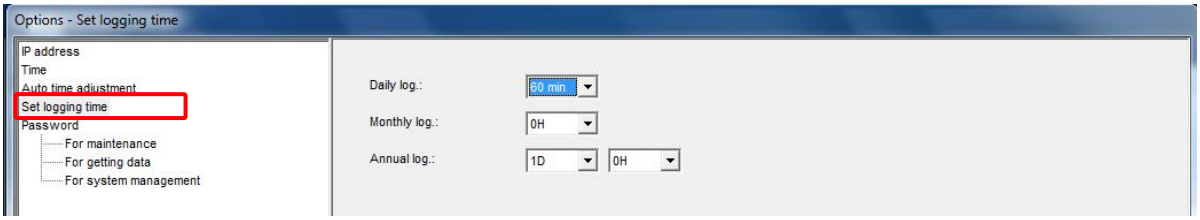
4.7.4. Logging date/time settings

This section describes the procedures for operating the [Set logging time].
The measuring point logging cycle, time and date are set with logging date/time setting.

Setting the logging date/time

1 Displaying the [Set logging time] dialog box

Click the [Set logging time] in the tree menu on the unit setting dialog box.



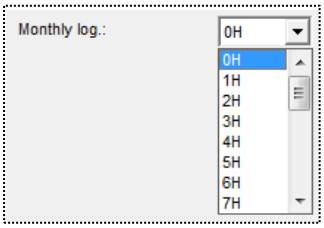
2 Setting the logging information

(1) Select the daily logging cycle.
Data is collected at the selected cycle, and is saved in the daily data file.

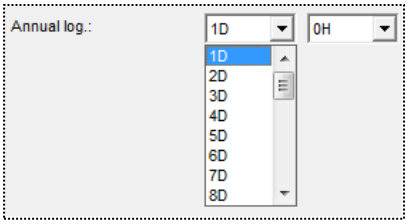
[half] : Collect data at a 30-minute cycle (collects on the hour and half hour)

[60 min.] : Collect data at a 60-minut cycle (collects on the hour)

(2) Select the monthly logging time.
Data is collected at the selected time, and is saved in the monthly data file.



(3) Select the annual logging time.
Data is collected at the selected date/time, and is saved in the annual data file.



3 Registering

Click the button on the [Set logging time] dialog box, and register the settings.

[Register] button : Register the logging date/time as the set information.

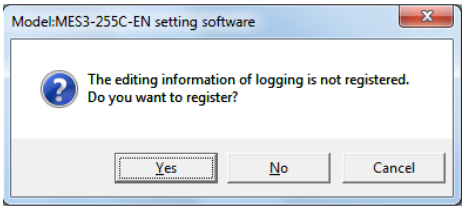
[Close] button : Back to the Project setting dialog box

* After modification of entry details of each item, click the [Close] button instead of clicking the [Register] button, the message shown on the right is displayed.

  [Yes] button : To register

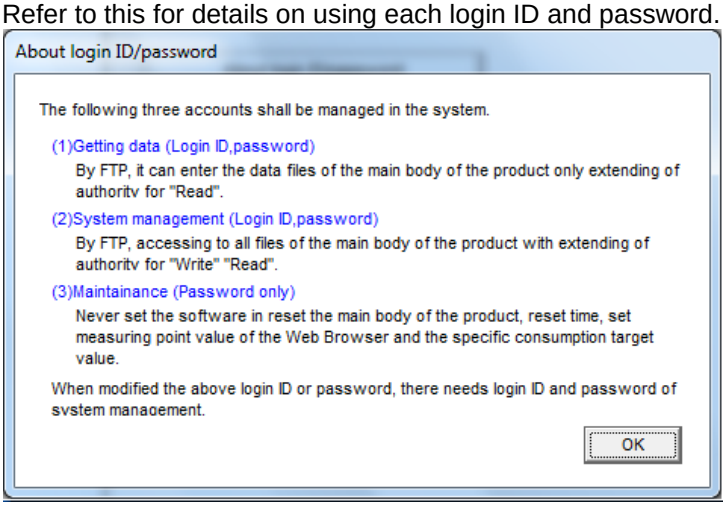
  [No] button : Not to register.

  [Cancel] button : To go back to the [Set logging time] dialog box



4.7.5. Setting of the login IDs and passwords

The following describes the steps for operation in [Password].
In EcoWebServerIII, three accounts are used: for (1)Getting data, (2) System management, and (3) Maintenance.
When the [About login ID/password] button on the [Password] screen is clicked, the following screen will open. Refer to this for details on using each login ID and password.


About login ID/password
The following three accounts shall be managed in the system.
(1)Getting data (Login ID,password)
By FTP, it can enter the data files of the main body of the product only extending of authoritv for "Read".
(2)System management (Login ID,password)
By FTP, accessing to all files of the main body of the product with extending of authoritv for "Write" "Read".
(3)Maintainance (Password only)
Never set the software in reset the main body of the product, reset time, set measuring point value of the Web Browser and the specific consumption target value.
When modified the above login ID or password, there needs login ID and password of system management.
OK

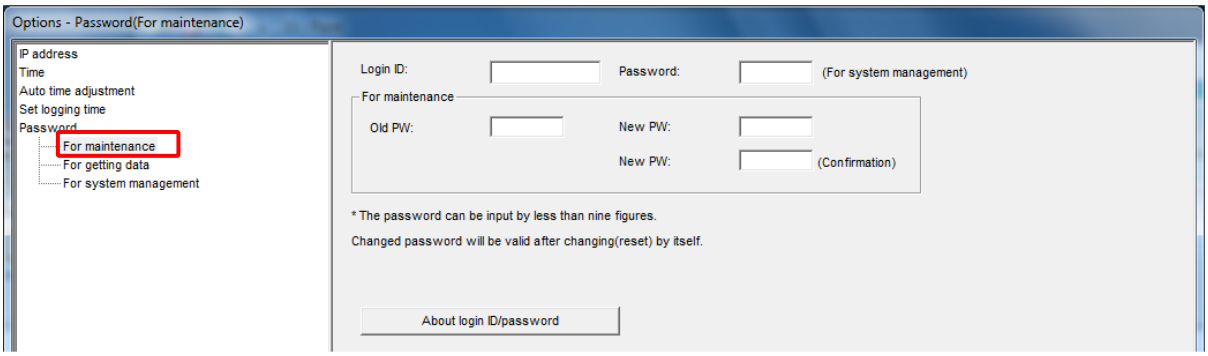
Changing the maintenance password

The following describes the steps for changing the maintenance password.

*** The default maintenance password is “ecopass”.**

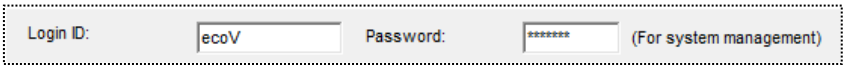
1 Displaying the [Password (For maintenance)] screen

Click the [Password] – [For maintenance] in the tree menu on the unit setting dialog box.



2 Inputting the system administration login ID and password

To verify the permission for change, type in the system administration login ID and password.



(The default system administration login ID and password are “ecoV” and “ecopass”, respectively.)

3 Inputting the maintenance password

Type in the [Old PW] that is used before the change and a [New PW] to be used after the change.

(1) Type in the current maintenance password in the [Old PW] field.(Default: “ecopass”)

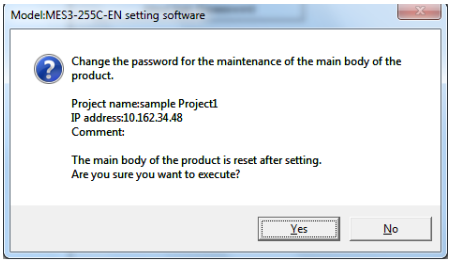
(2) Type in a new maintenance password at two sections: the [New PW] and [New PW (confirmation)] fields.
The input conditions are as follows.

Characters: Up to 8 characters

* A typed password will be displayed as asterisk (*).

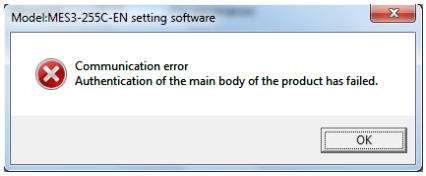
4 Changing

(1) When you click the [Change] button, the confirmation message will be displayed.

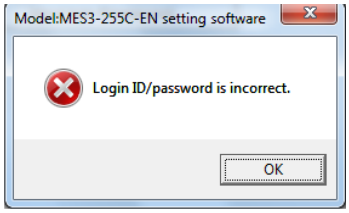

Model:MES3-255C-EN setting software
Change the password for the maintenance of the main body of the product.
Project name:sample Project1
IP address:10.162.34.48
Comment:
The main body of the product is reset after setting.
Are you sure you want to execute?
Yes
No

[Yes] button : Executes the change of the maintenance password.
[No] button : Cancels the change of the maintenance password.

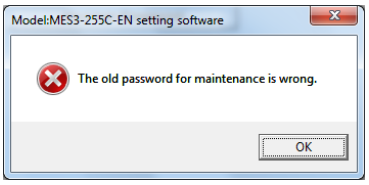
*1 If the IP address of EcoWebServerIII is incorrect, the LAN cable is not connected, or EcoWebServerIII is not powered on, the message on the right will be displayed.
Click the [OK] button and then check the IP address of EcoWebServerIII, the connection of the LAN cable, and whether the power is turned on.



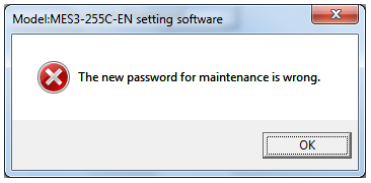
*2 If the system administration login ID or password is incorrect, the message on the right will be displayed.
Click the [OK] button and then check the login ID and password.



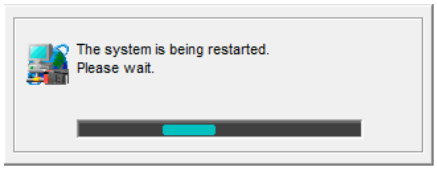
*3 If the previous maintenance password is incorrect, the message on the right will be displayed.
Click the [OK] button and then check the password.



*4 If the new maintenance password and the new password for confirmation do not match, the message on the right will be displayed.
Click the [OK] button and then check the password.

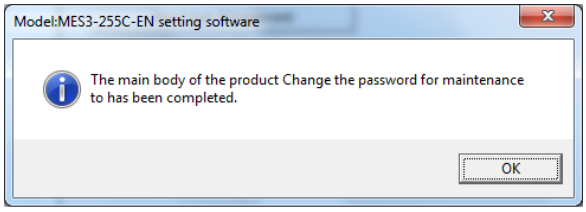


(2) After the password is changed, EcoWebServerIII will be reset.



*** It may take up to eight minutes to reset..**

(3) When the password change and reset are completed, the following message will be displayed.


Model:MES3-255C-EN setting software
The main body of the product Change the password for maintenance to has been completed.
OK

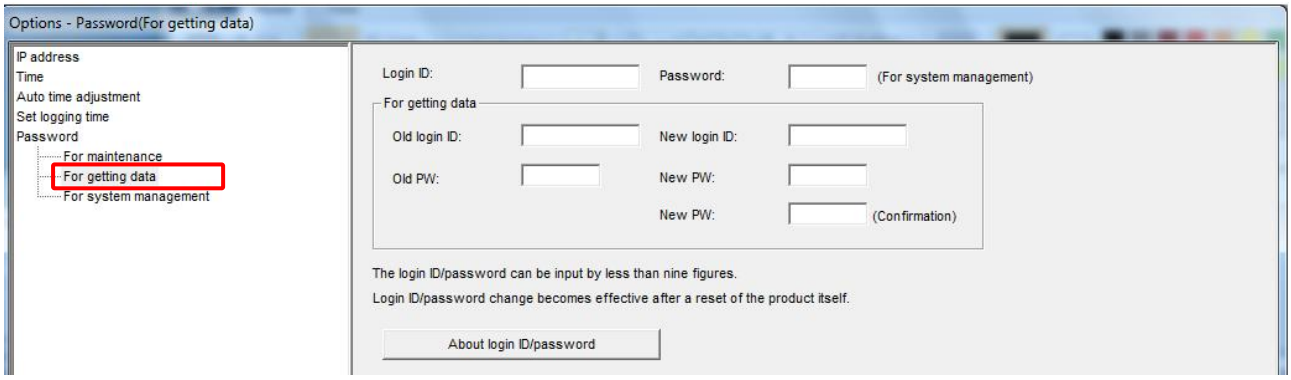
Changing the data acquisition login ID and password

The following describes the steps for changing the data acquisition login ID and password.

*** The default data acquisition login ID and password are "guest" and "user", respectively.**

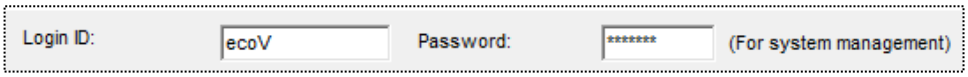
1 Displaying the [Password (For getting data)] screen

Click the [Password] – [For getting data] in the tree menu on the unit setting dialog box.



2 Inputting the system administration login ID and password

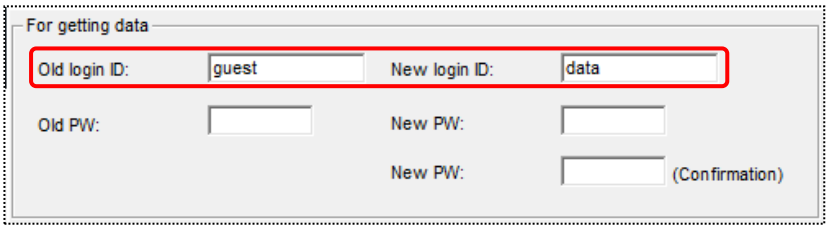
To verify the permission for change, type in the system administration login ID and password.



(The default system administration login ID and password are “ecoV” and “ecopass”, respectively.)

3 Inputting the data acquisition login ID

Type in the [Old login ID] that is used before the change and a [New login ID] to be used after the change.



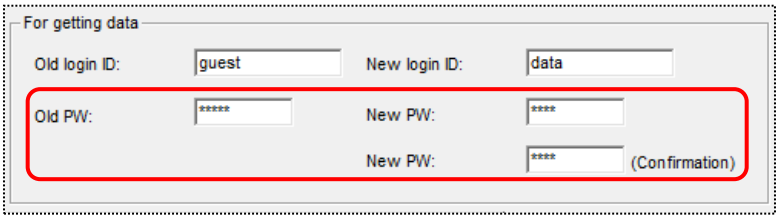
(1) Type in the current data acquisition login ID in the [Old login ID] field. (Default: “guest”)

(2) Type in a new data acquisition login ID in the [New login ID] field.
The input conditions are as follows.

Characters: Up to 8 characters

4 Inputting the data acquisition password

Type in the [Old PW] that is used before the change and a [New PW] to be used after the change.



(1) Type in the current data acquisition password in the [Old PW] field. **(Default: "user")**

(2) Type in a new data acquisition password at two sections: the [New PW] and [New PW (confirmation)] fields.

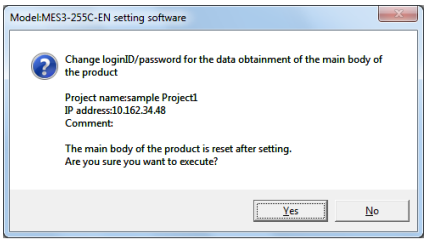
The input conditions are as follows.

Characters: Up to 8 characters

* A typed password will be displayed as asterisk (*).

5 Changing

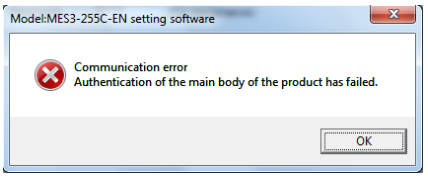
(1) When you click the [Change] button, the confirmation message will be displayed.


Model:MES3-255C-EN setting software
Change loginID/password for the data obtainment of the main body of the product
Project name:sample Project1
IP address:10.162.34.48
Comment:
The main body of the product is reset after setting.
Are you sure you want to execute?
Yes
No

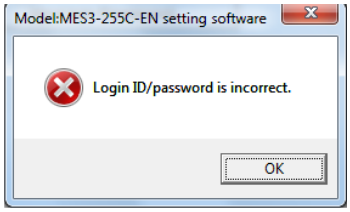
[Yes] button : Executes the change of the data acquisition login ID and password.

[No] button : Cancels the change of the data acquisition login ID and password.

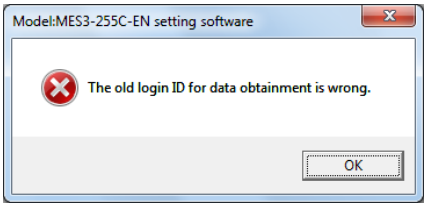
*1 If the IP address of EcoWebServerIII is incorrect, the LAN cable is not connected, or EcoWebServerIII is not powered on, the message on the right will be displayed.
Click the [OK] button and then check the IP address of EcoWebServerIII, the connection of the LAN cable, and whether the power is turned on.



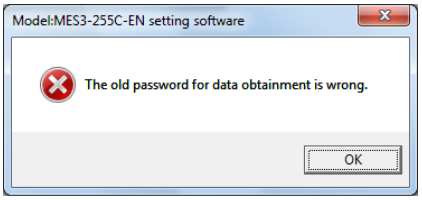
*2 If the system administration login ID or password is incorrect, the message on the right will be displayed.
Click the [OK] button and then check the login ID and password.



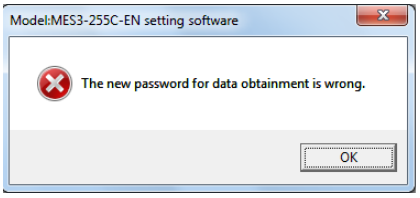
*3 If the previous data acquisition login ID is incorrect, the message on the right will be displayed.
Click the [OK] button and then check the password.



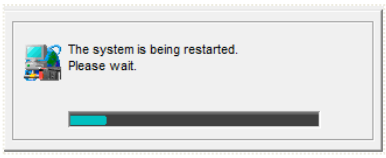
*4 If the previous data acquisition password is incorrect, the message on the right will be displayed.
Click the [OK] button and then check the password.



*5 If the new data acquisition password and the new password for confirmation do not match, the message on the right will be displayed.
Click the [OK] button and then check the password.

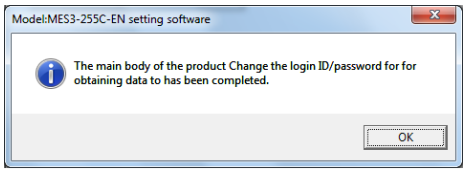


(2) After the login ID and password are changed, EcoWebServerIII will be reset.



*** It may take up to eight minutes to reset..**

(3) When the change of the login ID and password and reset are completed, the following message will be displayed.


Model:MES3-255C-EN setting software
The main body of the product Change the login ID/password for for obtaining data to has been completed.
OK

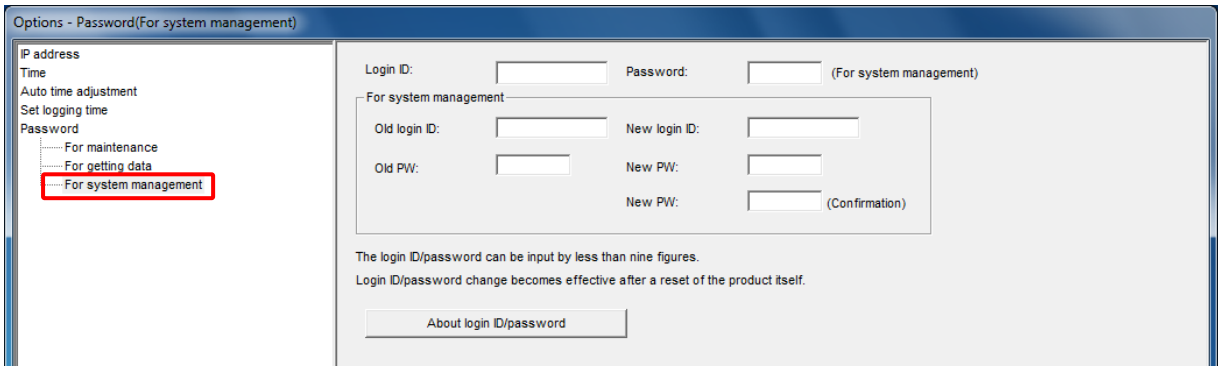
Changing the system administration login ID and password

The following describes the steps for changing the system administration login ID and password.

*** The default system administration login ID and password are “ecoV” and “ecopass”, respectively.)**

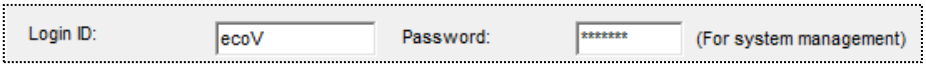
1 Displaying the [Password (For system management)] screen

Click the [Password] – [For system management] in the tree menu on the unit setting dialog box.



2 Inputting the system administration login ID and password

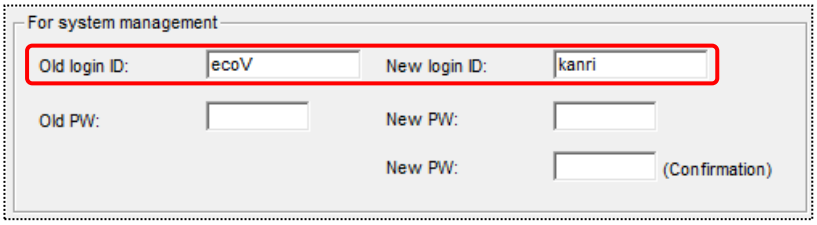
To verify the permission for change, type in the system administration login ID and password.



(The default system administration login ID and password are “ecoV” and “ecopass”, respectively.)

3 Inputting the system administration login ID

Type in the [Old login ID] that is used before the change and a [New login ID] to be used after the change.



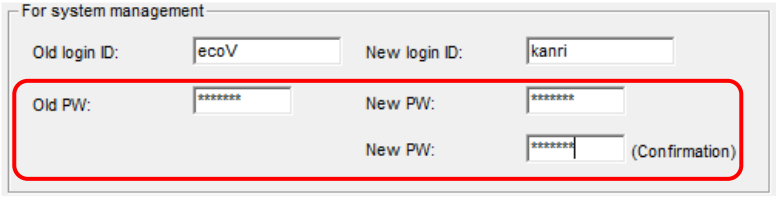
(1) Type in the current data acquisition login ID in the [Old login ID] field. (Default: “ecoV”)

(2) Type in a new data acquisition login ID in the [New login ID] field.
The input conditions are as follows.

Number of characters: Up to 8 characters

4 Inputting the system administration password

Type in the [Old PW] that is used before the change and a [New PW] to be used after the change.



(1) Type in the current system administration password in the [Old PW] field. **(Default: "ecopass")**

(2) Type in a new system administration password at two sections: the [New PW] and [New PW (confirmation)] fields.

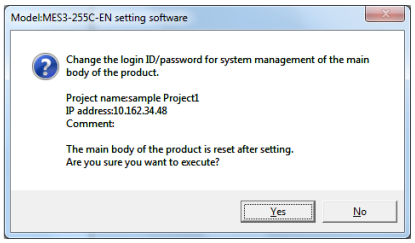
The input conditions are as follows.

Number of characters: Up to 8 characters

* A typed password will be displayed as asterisk (*).

5 Changing

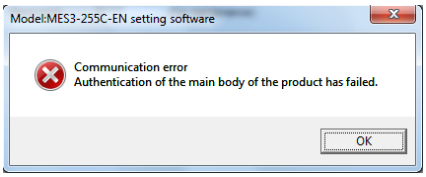
(1) When you click the [Change] button, the confirmation message will be displayed.


Model:MES3-255C-EN setting software
Change the login ID/password for system management of the main body of the product.
Project name:sample Project1
IP address:10.162.34.48
Comment:
The main body of the product is reset after setting.
Are you sure you want to execute?
Yes
No

[Yes] button : Executes the change of the system administration login ID and password.
[No] button : Cancels the change of the system administration login ID and password.

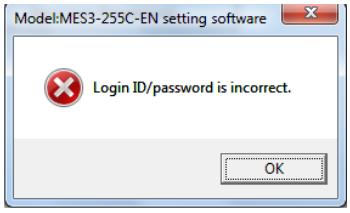
*1 If the IP address of EcoWebServerIII is incorrect, the LAN cable is not connected, or EcoWebServerIII is not powered on, the message on the right will be displayed.

Click the [OK] button and then check the IP address of EcoWebServerIII, the connection of the LAN cable, and whether the power is turned on.



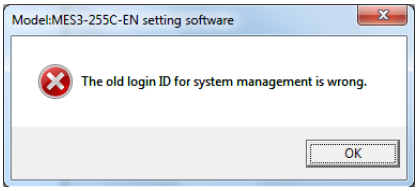
*2 If the system administration login ID or password is incorrect, the message on the right will be displayed.

Click the [OK] button and then check the login ID and password.

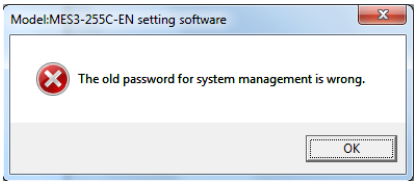


*3 If the system administration login ID is incorrect, the message on the right will be displayed.

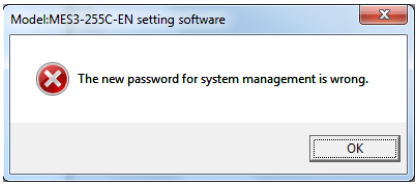
Click the [OK] button and then check the password.



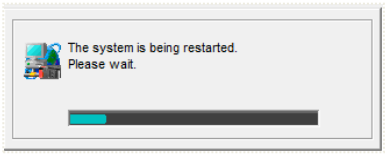
*4 If the previous system administration password is incorrect, the message on the right will be displayed.
Click the [OK] button and then check the password.



*5 If the new system administration password and the new password for confirmation do not match, the message on the right will be displayed.
Click the [OK] button and then check the password.

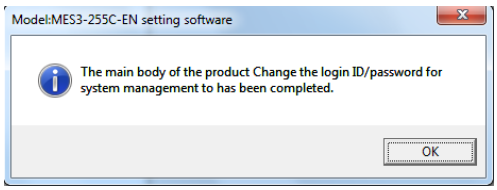


(2) After the login ID and password are changed, EcoWebServerIII will be reset.



*** It may take up to eight minutes to reset.**

(3) When the change of the login ID and password and reset are completed, the following message will be displayed.

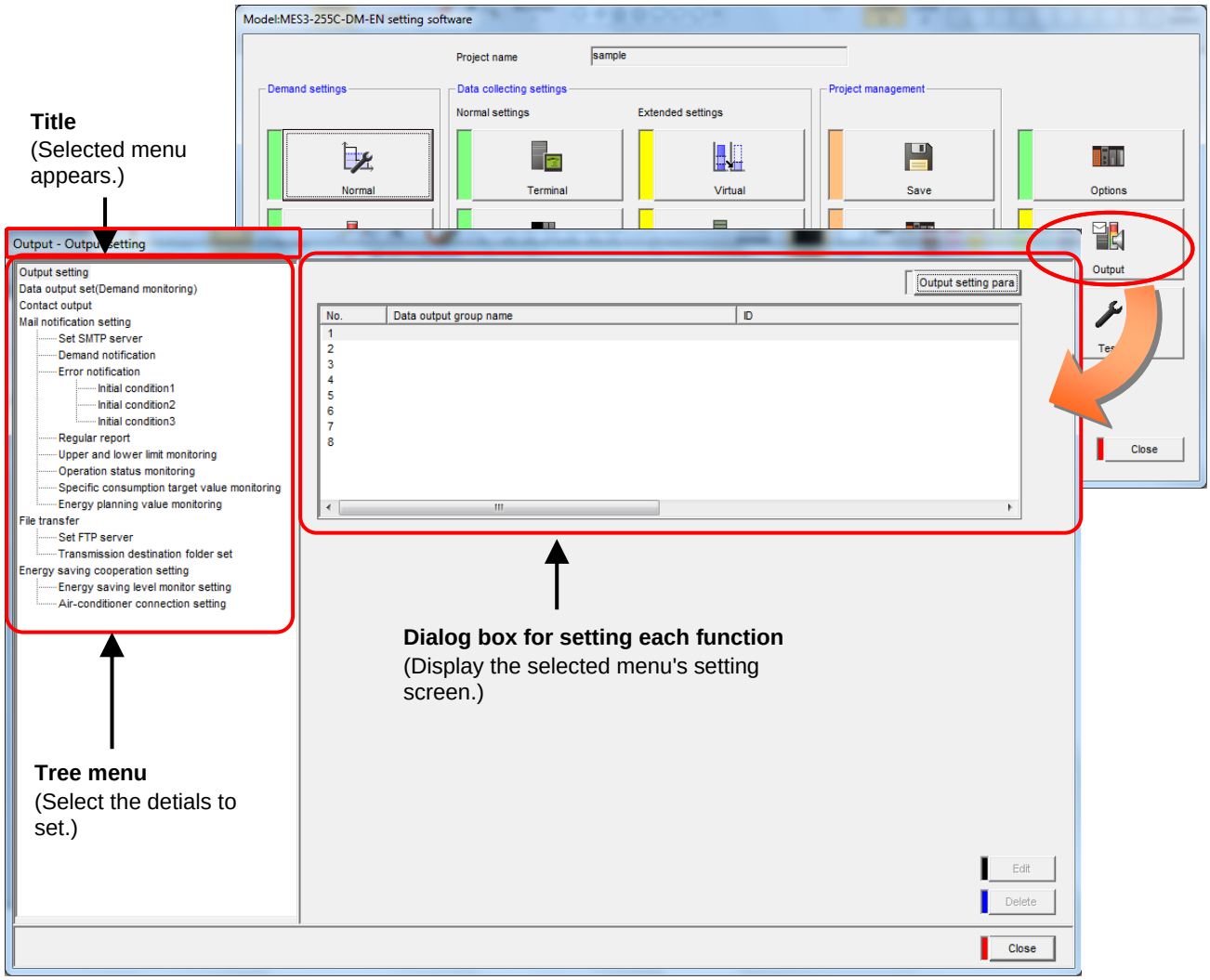

Model:MES3-255C-EN setting software
The main body of the product Change the login ID/password for system management to has been completed.
OK

4.8. Setting external device coordination

This section describes the settings related to the data output settings, contact output settings and mail notification settings, etc.

1 Displaying the external device coordination setting screen

Click the [Output] on the project setting screen.



* The data output setting (demand control), demand notification, energy saving level monitor setting and air-controller connection setting functions are supported only with the EcoWebServerIII with demand control function.

2 Selecting the details to set from the tree menu

[Output setting] is selected as the default.

Remarks

- Click the [Close] button to return to the Project setting dialog box.

4.8.1. Data output settings

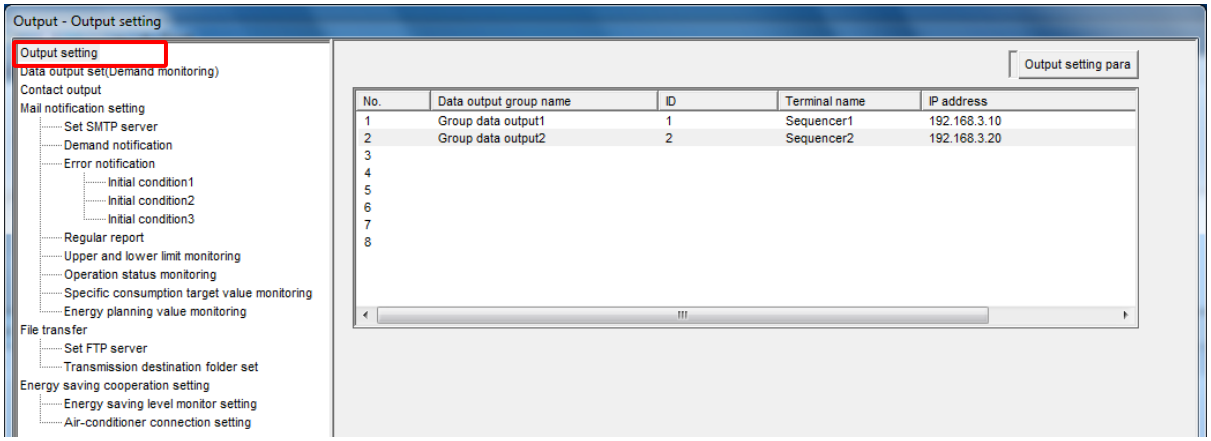
These settings are made to output the measuring point data (current value) to the MELSEC PLC/GOT using Ethernet communication or Ethernet/Serial adaptor cable.
The settings output to the PLC/GOT are managed as an output group.

Checking a list of data output group

The following describes how to display and confirm the list of data output groups.

1 Displaying the [Output setting] screen

Click the [Output setting] in the tree menu on the external device coordination setting screen.



2 Checking the registration information

Check the following information displayed in the data output group list.

[No.] : Data output group No.
[Data output group name] : Name of registered data output group
[ID] : Registered measuring point ID
[Terminal name] : Name of PLC or GOT terminal that outputs the data
[IP address] : IP address of PLC or GOT that outputs the data
[Station No.] : Station No. of PLC serial communication unit when Ethernet/Serial conversion is selected for data communication with EcoWebServerIII

Registering data output group

This section describes how to register the data output group

*1 Up to 32 measuring points per group and up to 8 groups (maximum 255 measuring points) can be registered in a data output group.

*2 If a single measuring point is not registered, or if a single PLC or GOT is not registered, the output group cannot be registered.

*3 One measuring point cannot be registered in duplicate in multiple output groups

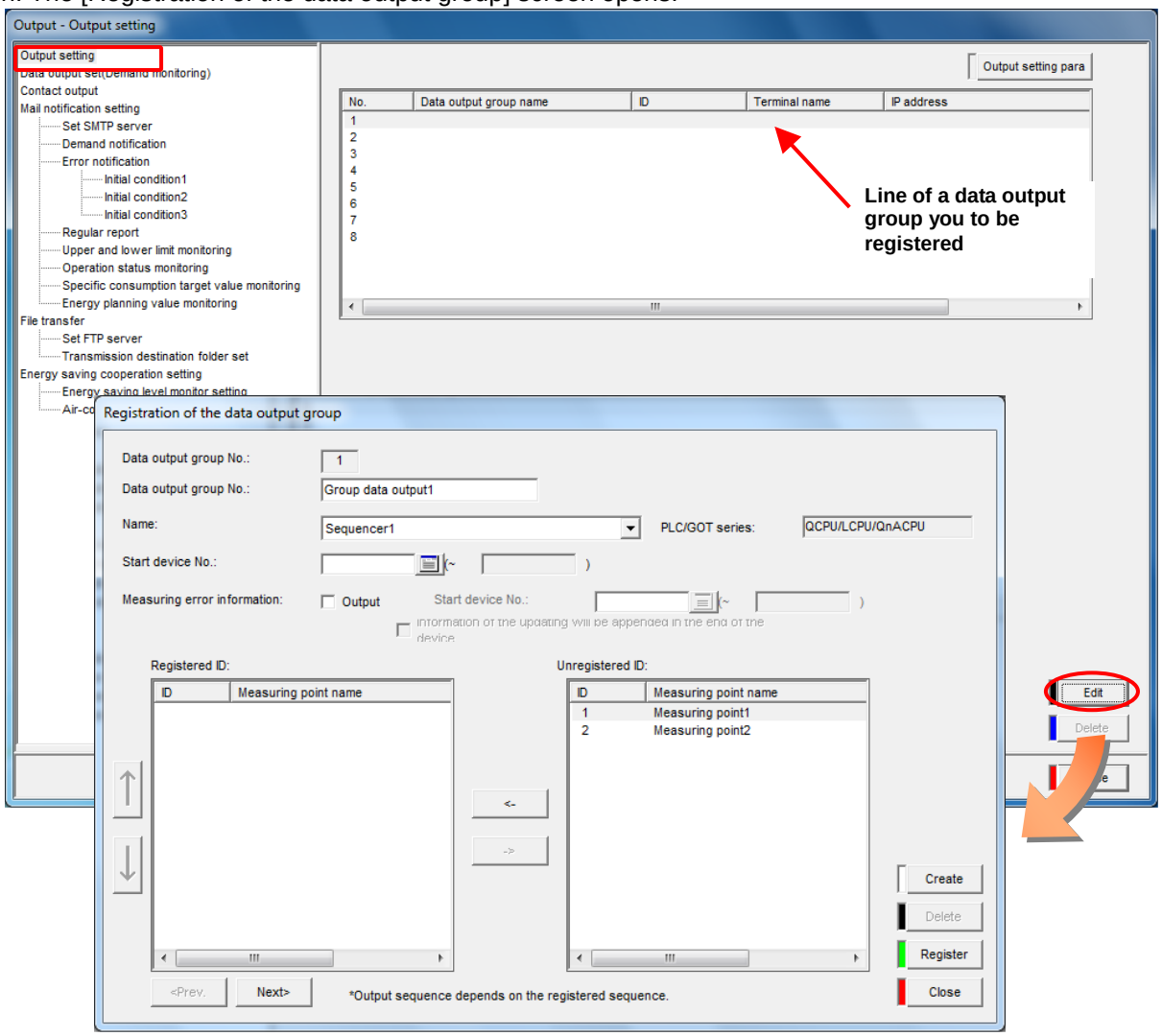
*4 Virtual measuring points cannot be registered in an output group (cannot be output to the PLC or GOT).

1 Displaying the [Output setting] screen

Click the [Output setting] in the tree menu on the external device coordination setting screen.

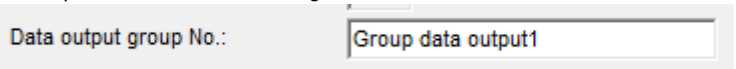
2 Displaying the [Registration of the data output group] screen

Select a line of a data output group you want to register on the [Output setting] screen, and click the [Edit] button. The [Registration of the data output group] screen opens.



3 Entering or selecting the items

Enter or select the following items.

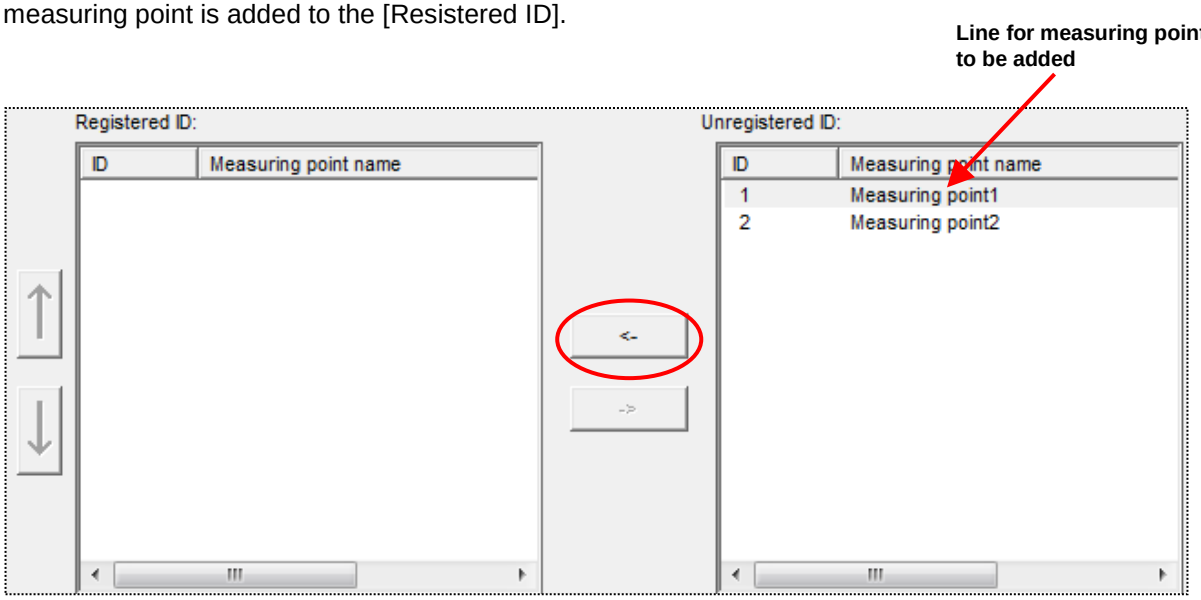
<table>
<tr><td>[Data output group Name]</td><td>Enter a name of the output group in the [Data output group name].
* A duplicate name cannot be registered.
  <table><tr><td>Characters</td><td>Up to 24 characters</td></tr><tr><td>Prohibited characters</td><td>The following characters cannot be registered:
¥ / : , ; * ? " < > |</td></tr></table></td></tr>
<tr><td>[Name]</td><td>Select the PLC to where the data will be output from the pull-down menu.
The selected PLC CPU series will be displayed.
 </td></tr>
<tr><td>[Start device No.]</td><td>Input the start device No. for the data output destination.
Refer to section “5.10 Items output to PLC/GOT” for the setting range.
Depending on the number of measuring points registered in the output group, the last device number will appear automatically. The last device number cannot be set in duplicate with a device registered as a measuring point.

Click to display the range of devices that can be set for each CPU series.<table><tr><td>Device</td><td>Only D devices</td></tr><tr><td>Characters</td><td>Up to 5 half-byte alphanumeric characters or 7 characters including device name</td></tr><tr><td>Types of characters</td><td>Decimal or hexadecimal in device name number section</td></tr></table></td></tr>
<tr><td>[Measuring error information]</td><td>Check this to enable measuring error outputs</td></tr>
<tr><td>[Start device No.]</td><td>When output of measuring error is enabled, set the start number of the device that is outputting the measuring error information.
Refer to section “5.10 Items output to PLC/GOT” for the setting range.
Depending on the number of measuring points registered in the output group, the last device number will appear automatically. The last device number cannot be set in duplicate with a device registered as a measuring point.

Click to display the range of devices that can be set for each CPU series.<table><tr><td>Device</td><td>Only D devices</td></tr><tr><td>Characters</td><td>Up to 5 half-byte alphanumeric characters or 7 characters including device name</td></tr><tr><td>Types of characters</td><td>Decimal or hexadecimal in device name number section</td></tr></table></td></tr>
<tr><td>[Information of the updating will be appended in the end of the device]</td><td>Check when adding the update time information (min./sec.) to the measuring error information when output of the measuring errors is enabled.</td></tr>
</table>

4 Adding measuring points to output data

Select the measuring point you want to add from the [Resistered ID], and click the [<-] button.
The measuring point is added to the [Resistered ID].



*1 The data is output to the PLC in the order that the output groups are registered.
The measuring points in the [Measuring point list (registered)] are sorted in registered order.

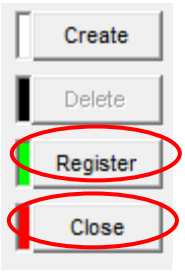
*2 Rearrange order of measuring points in the [Measuring point list (registered)] by selecting the measuring point name and clicking the [↑] or [↓] buttons.
Click [↑] once to move the measuring point up one.
Click [↓] once to move the measuring point down one.

5 Deleting measuring points to output data

Select the measuring point you want to delete from the [Resistered ID], and click the [->] button.
The measuring point is deleted from the [Resistered ID].

6 Registering

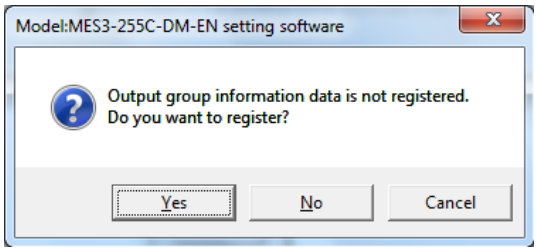
Click the button on the [Registration of the data output group] dialog box to register the data output group.



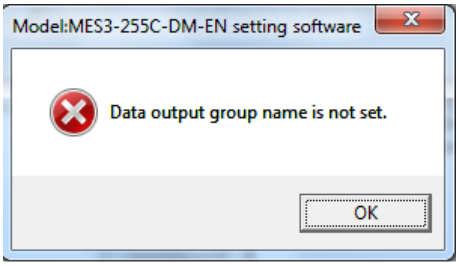
[Register] button : Register the data output group settings you set.

[Close] button : Back to the [Output setting] dialog box.

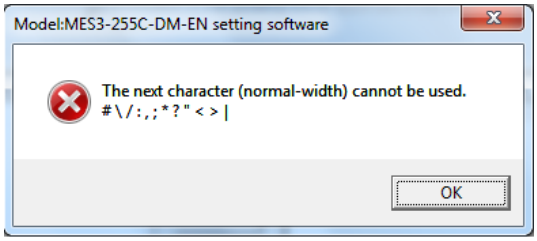
Click the [Create], [<Prev], [Next>] or [Close] button without clicking the [Register] button, the message shown on the right will be displayed.
Click [Yes] to register. Click [No] to not.
Click [Cancel] to back page to [Registration of the data output group].



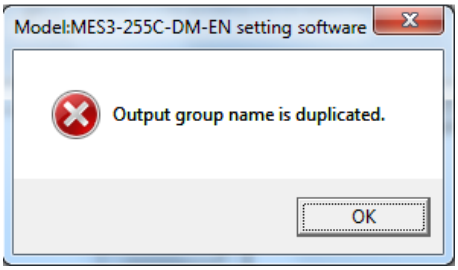
If data output group name is not input, the following message will be displayed.
Click [OK] to back to input name.



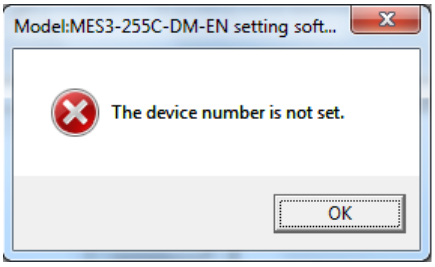
If prohibited characters are used, the following message will be displayed.
Click the [OK] button and change or delete the corresponding character.



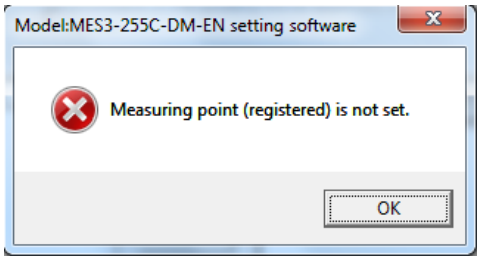
If the group name is duplicated, the following message will be displayed.
Click the [OK] button and change the output group name.



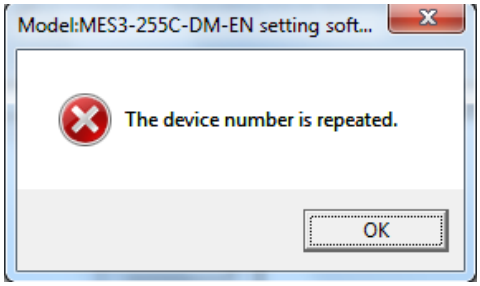
If the device No. is not set, the following message will be displayed.
Click the [OK] button and set the device No.



If measuring point is not registered, the following message will be displayed.
Click the [OK] button and register the measuring point.



If device No. is duplicated, the following message will be displayed.
Click the [OK] button and change the device No.



Editing the registered data output group

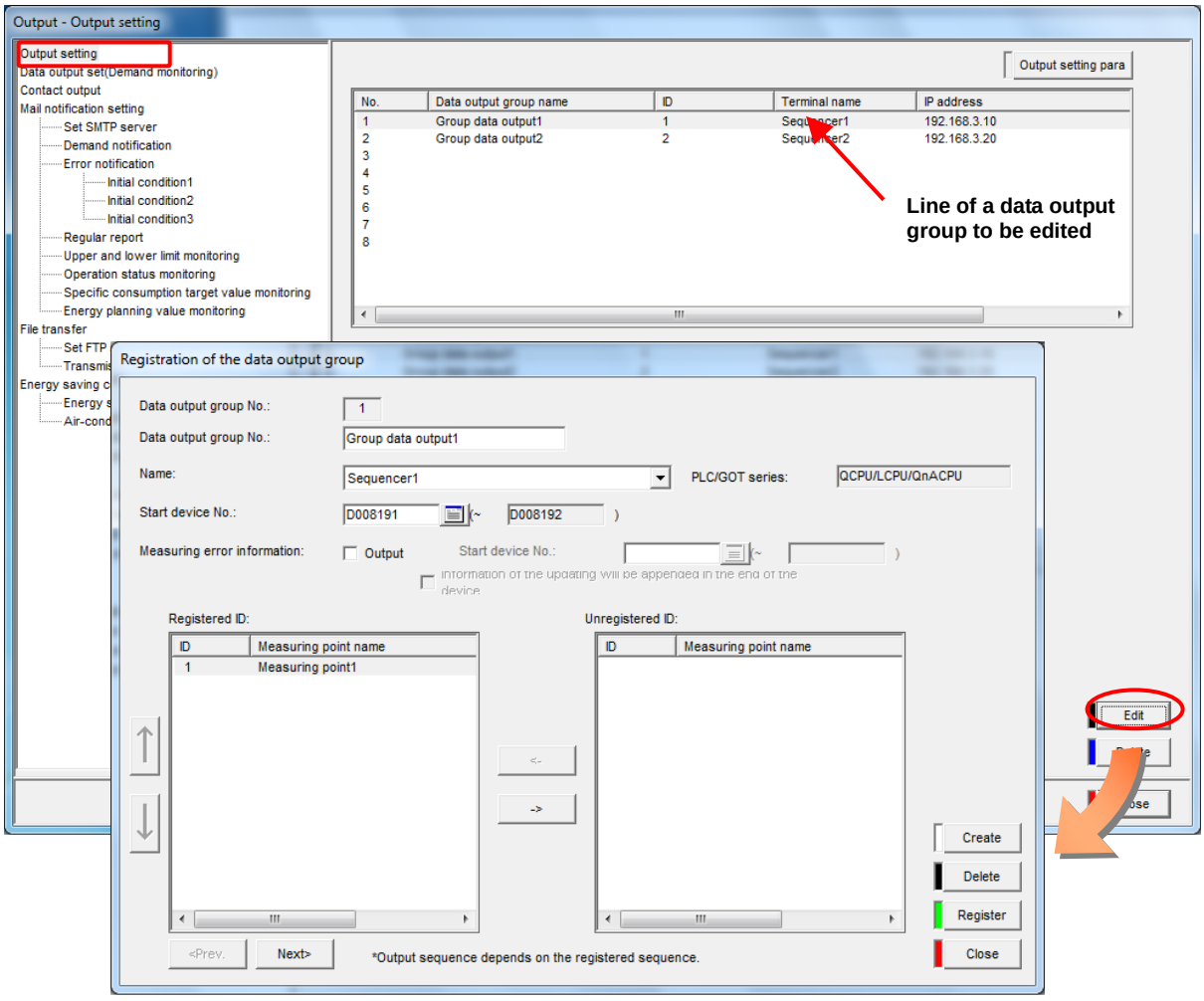
This section described how to edit registration information of data output group.

1 Displaying the [Output setting] screen

Click the [Data output setting] in the tree menu on the external device coordination setting screen.

2 Displaying the [Registration of the data output group] screen

Select the line of the data output group you want to edit on the [Output setting] screen, and click the [Edit] button. The [Registration of the data output group] screen displays.



3 Editing the items to be changed and registering them

Edit the item to be changed and then click the [Register] button.

* The entries and input conditions for each item are the same as registering a data output group.

Deleting a registered data output group

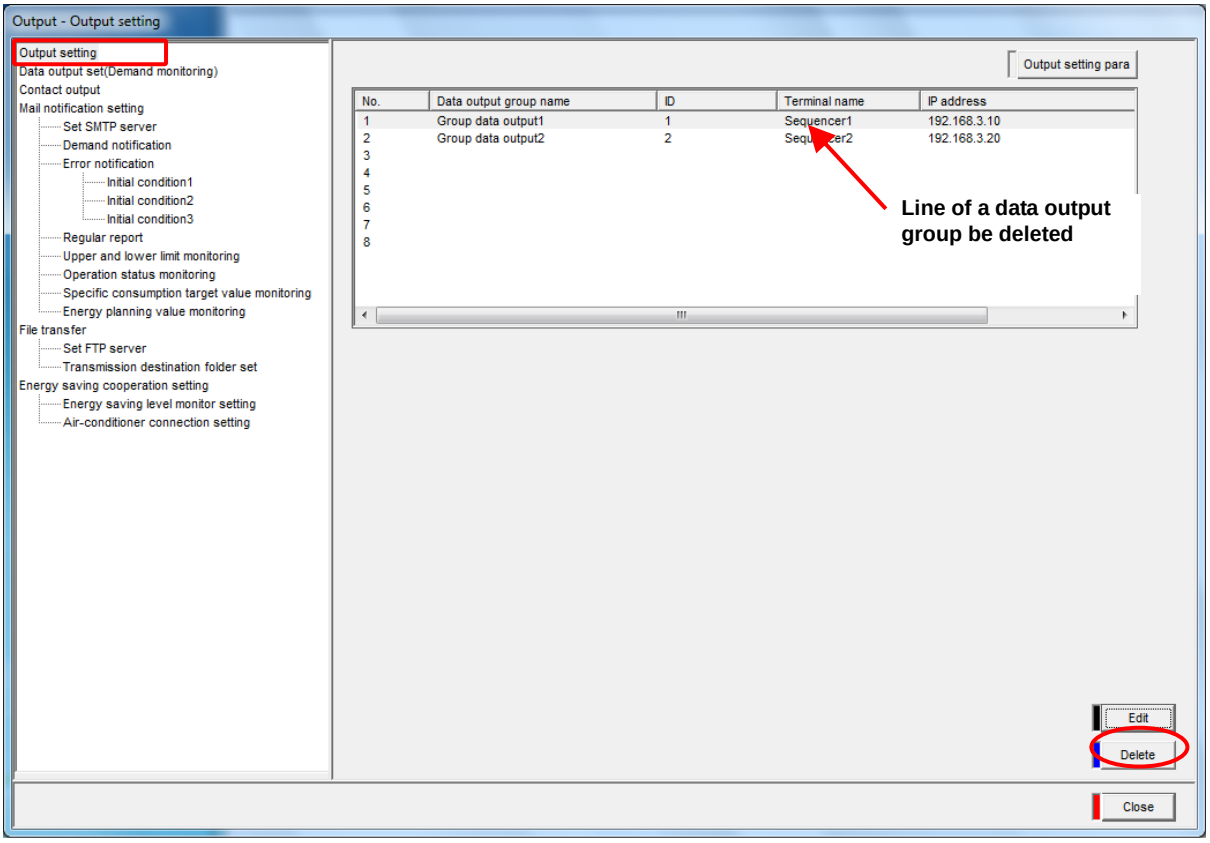
This section described how to delete a registered data output group.

1 Displaying the [Output setting] screen

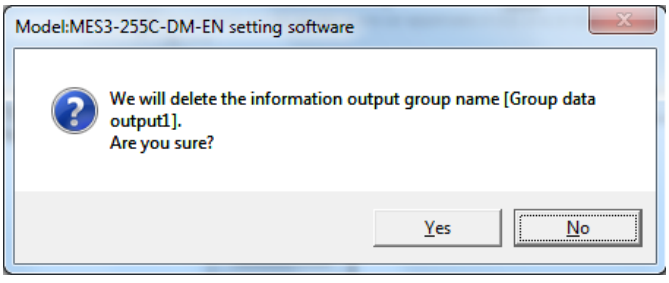
Click the [Data output setting] in the tree menu on the external device coordination setting screen.

2 Deleting a data output group

Select the line of the data output group to be deleted on the [Output setting] screen, and click the [Delete] button.



The following message will be displayed. Click the [Yes] button.



Outputting data output group parameters

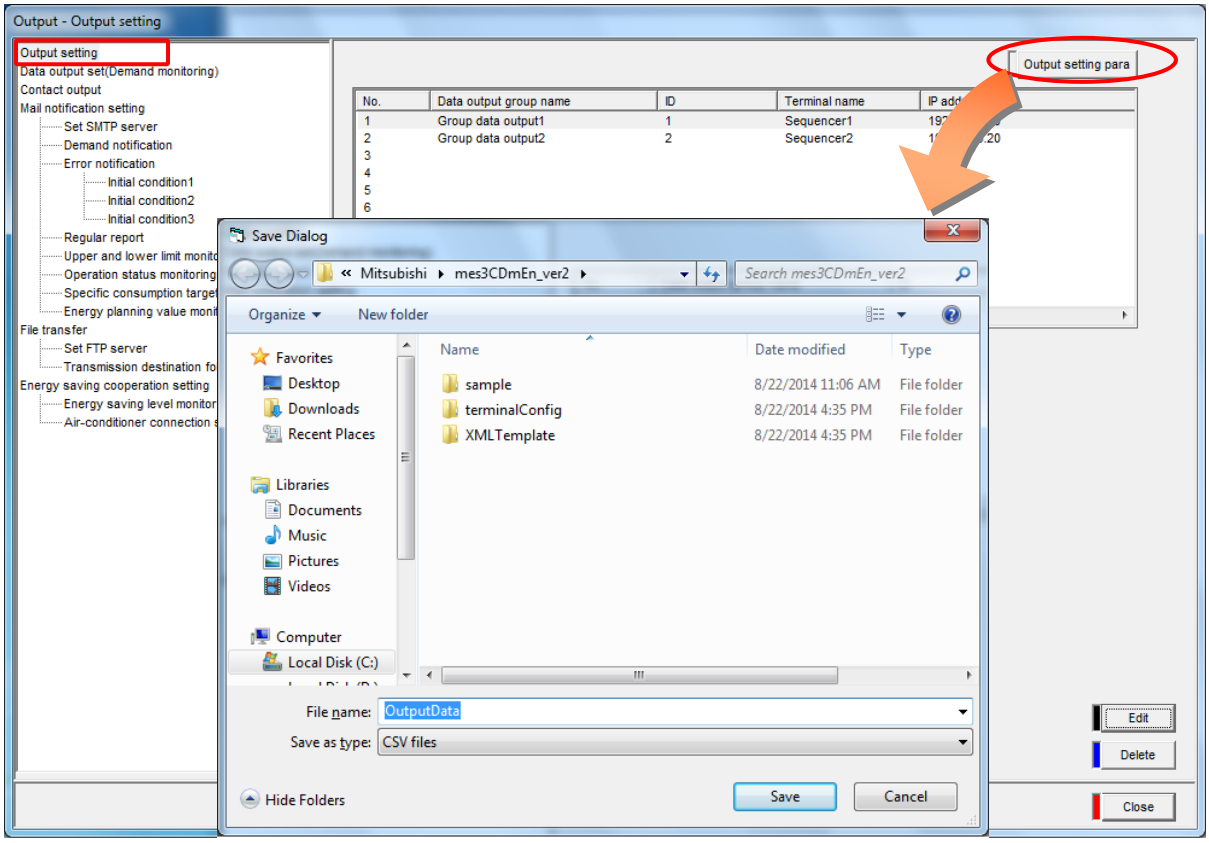
This section described how to output data output group parameters to CSV file.

1 Displaying the [Output setting] screen

Click the [Output setting] in the tree menu on the external device coordination setting screen.

2 Outputting setting parameters

Output the information related to each measuring point data and device No. to be output to a CSV file (data output setting information file). Click the [Output setting para] button to display save dialog.



The save dialog appears. Specify any save destination and file name, and click the [Save] button.

The form of data output setting parameters is following.

Item		Contents
File name		'OutputData' + '.csv'　* Can be randomly specified at output
Content		Record information for data output
	1st line	<Version>
	2nd line	Version of setting software
	3rd line	<Output condition>
	4th line	Output cycle　* Fixed to 60 seconds
	5th line	<Output information>
	6th line	Measuring point ID, Measuring point name, Unit, Measuring item*1, Decimal point*2, data type*3, Channel*4, Pulse factor*5, Scale type*6, power factor type*7, Data output device No., Measuring error information, error output device No.(bit), output group No.
	:	:
	:	:
	nth line	<Data output group information>
	(n+1)th line	Output group No., Output group name, IP address, Port No., PLC station No., Start device No. of information updating*8

*1 Measuring item → Measuring item for terminals (Device No. for PLC)
*2 Decimal point → Decimal
*3 Data type → 1. Analog　2. Pulse　3. Digital
*4 Channel → Channel No. for terminals (Data length for PLC)
*5 Pulse factor → 0: 0.01　1:0.1　2:1 (only for MP11A)　−1: No corresponding item
*6 Scale type → 0: 0 to 20 mA　1:4 to 20 mA　2:0 to 5 V　3:1 to 5 V　4:-5 to 5 V
*7 Power factor type → 0: −0% - 100% - 0%　1: −50% - 100% - 50%
*8 Start device No. of information updating → Blank for no updating

Example of OutputData.csv

```
<Version>
2.0.0
<Output Condition>
60Second
<Output Information>
1,"Energy1","kWh","Energy",1,2,63,-1,0,0,"D002000","",1
9,"Voltage1","V","Voltage",1,1,89,-1,0,-1,"D002002","",1
5,"Current1","A","Current",1,1,57,-1,0,-1,"D002004","",1
7,"S-T Voltage1","V","S-T Voltage",1,1,7,-1,0,-1,"D000150","D001000(b0)",2
10,"Power factor1","%","Power factor",1,1,27,-1,0,0,"D000152","D001000(b1)",2
12,"Production line counter1","Pcs.","D000051",0,2,0,,,-1,"D000154","D001000(b2)",2
<Output data group information>
1,"Data output group1","10.23.45.6",80,0,""
2,"Data output group2","10.23.45.6",80,0,"D001001"
```

4.8.2. Data output settings (demand control) (Only when demand control function is provided)

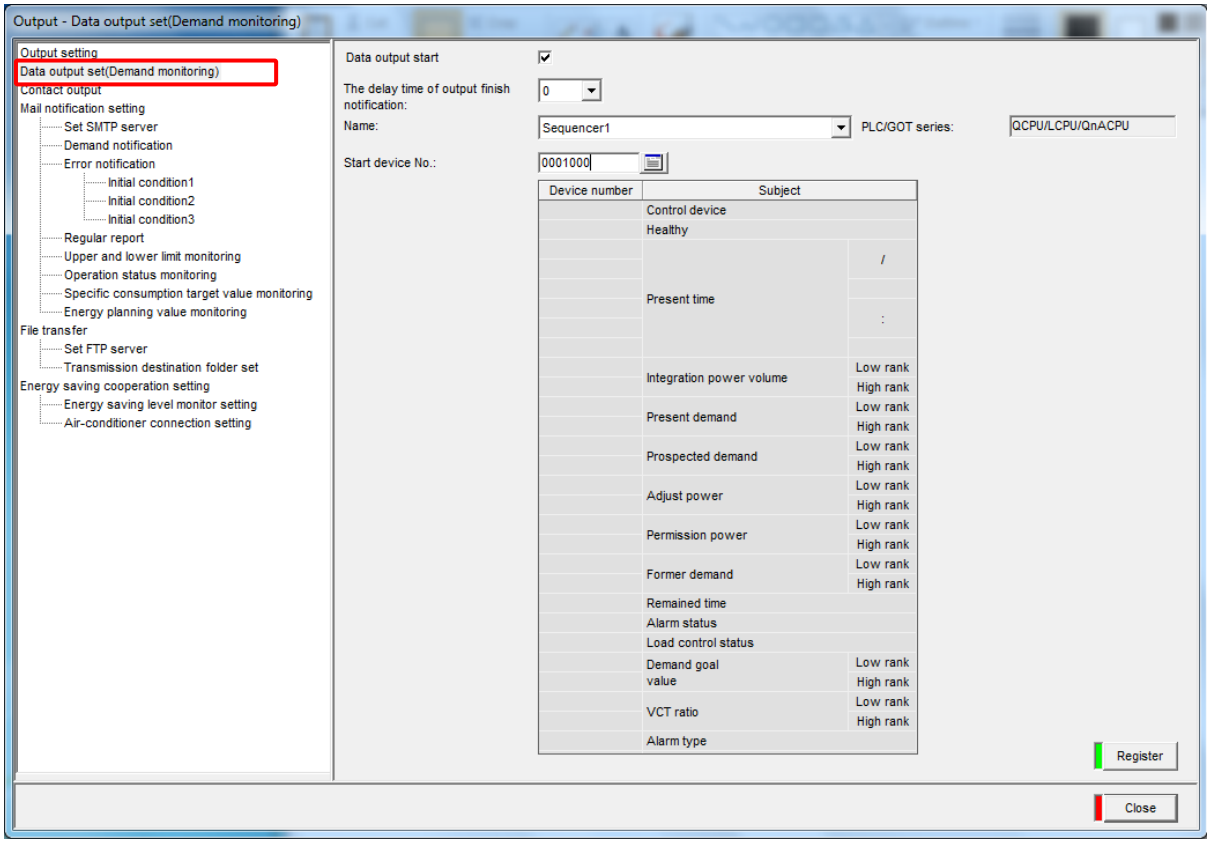
These settings are made to output the measuring point data for demand control to the MELSEC PLC/GOT using Ethernet communication or Ethernet/Serial adaptor cable.

Checking the registered information for the data output settings (demand control)

Display the data output setting (demand control) and describe how to check the registered information.

1 Displaying the [Data output set (Demand control)] screen

Click the [Data output set (Demand control)] in the tree menu on the external device coordination setting screen.



2 Checking the registration information

Check the settings for the demand control data output destination displayed on the [Data output set (Demand control)] screen.

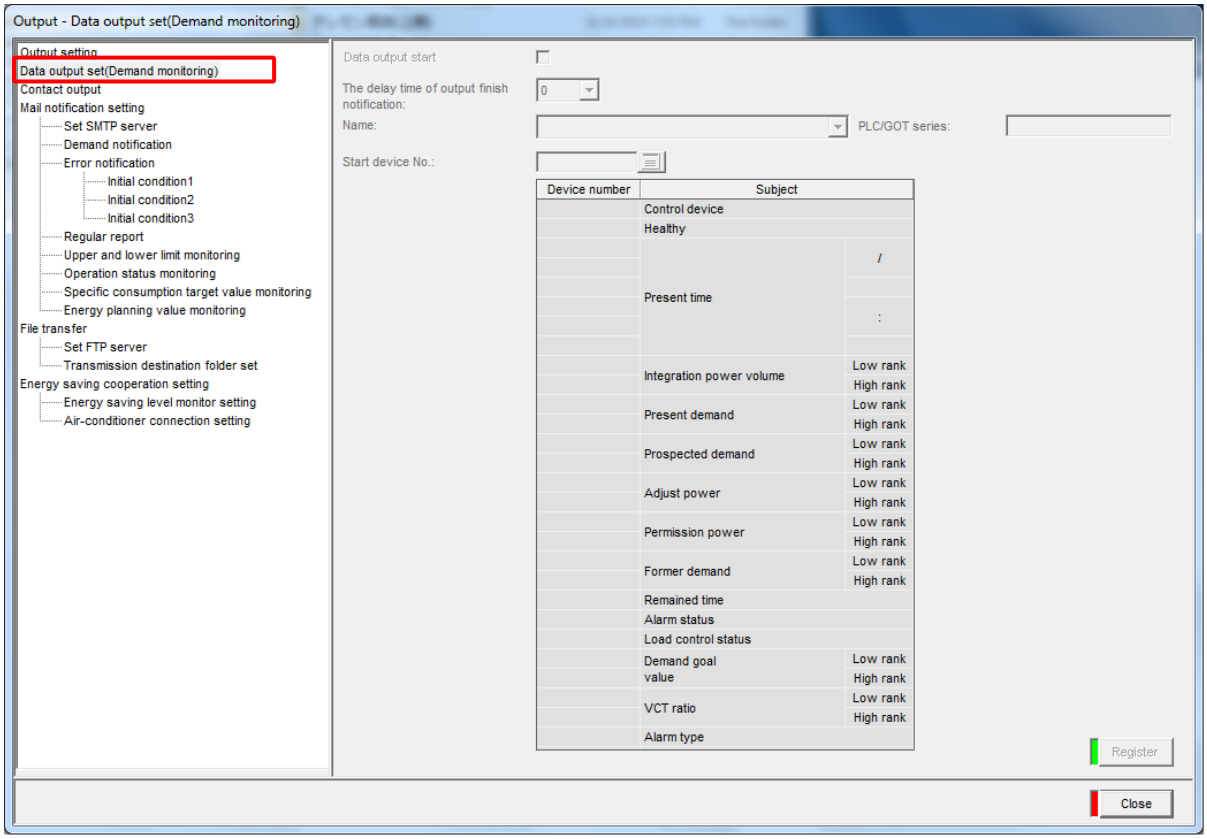
Registering the data output settings (demand control)

This section describes the procedures for registering the data output settings (demand control).

* The data output settings (demand control) cannot be registered if a single PLC or GOT is not registered.

1 Displaying the [Data output set (Demand control)] screen

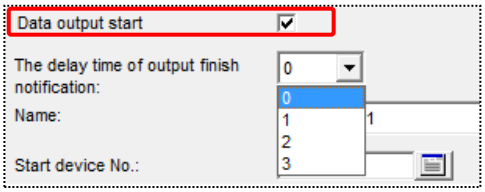
Click the [Data output set (Demand control)] in the tree menu on the external device coordination setting screen.



2 Entering or selecting the items

(1) [Data output start]

Check [Data output start] to enable output of the demand control measuring point data.



* The following items can be set only when this item is checked.

(2) [The delay time of output finish notification]

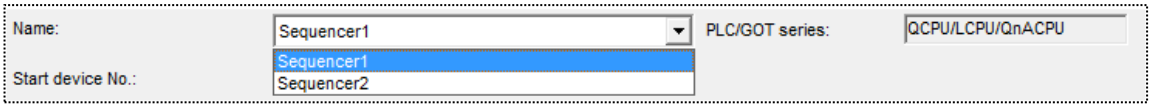
Set the time to delay update of the control device to "Write complete" after output of the demand control measuring data is completed.

* The delay time can be set in the range of 0 to 3 seconds.

(3) [Name]

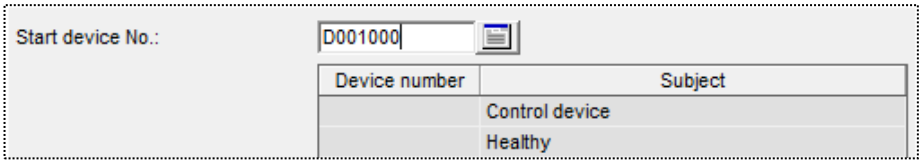
Select the PLC that outputs the data.

* Information displayed in Terminal pull-down menu:
PLC/GOT terminal name registered in PLC/GOT registration.
For the CPU, GOT series, the registered PLC/GOT information is displayed.



(4) [Device number]

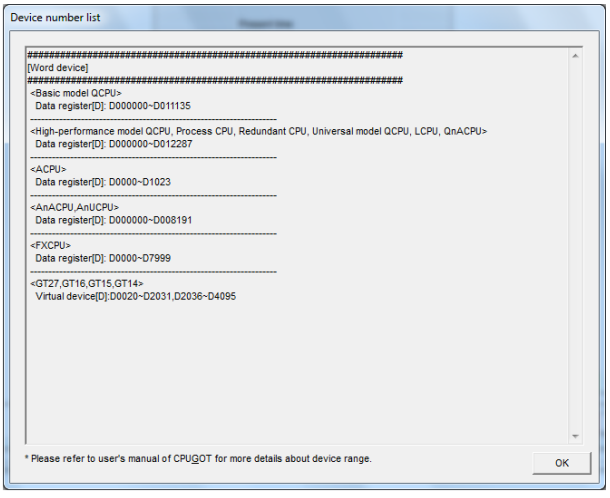
Enter the device number with device name using half-byte numerals.



* Refer to "**5.7 List of device measuring items"** for the setting range.

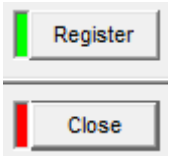
The setting range appears when the [ ] button at the side of the input field is clicked.

* Characters other than the setting range cannot be registered.



3 Registering

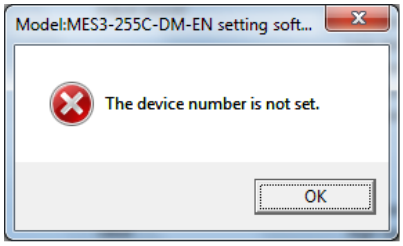
Click the button on the [Data output set (Demand control)] dialog box to register.



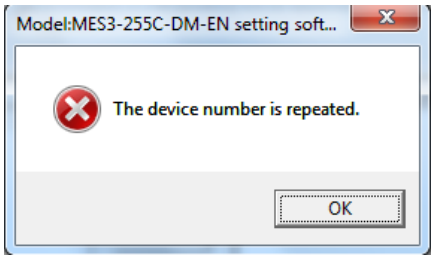
[Register] button : Register the data output setting (demand control) you set.

[Close] button : Back to the project setting dialog box.

*1 If the device No. is not set, the message shown on the right will be displayed.
Click the [OK] button and set the device No.



*2 If the device No. is duplicated, the message shown on the right will be displayed.
Click the [OK] button and change the device No.

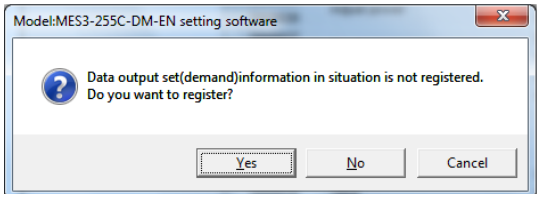


*3 After modification of entry details of each item, click the [Close] button instead of clicking the [Register] button or another tree menu is selected, the message shown on the right is displayed.

[Yes] button : To register

[No] button : Not to register.

[Cancel] button : Back to the [Data output setting (demand control)] screen.

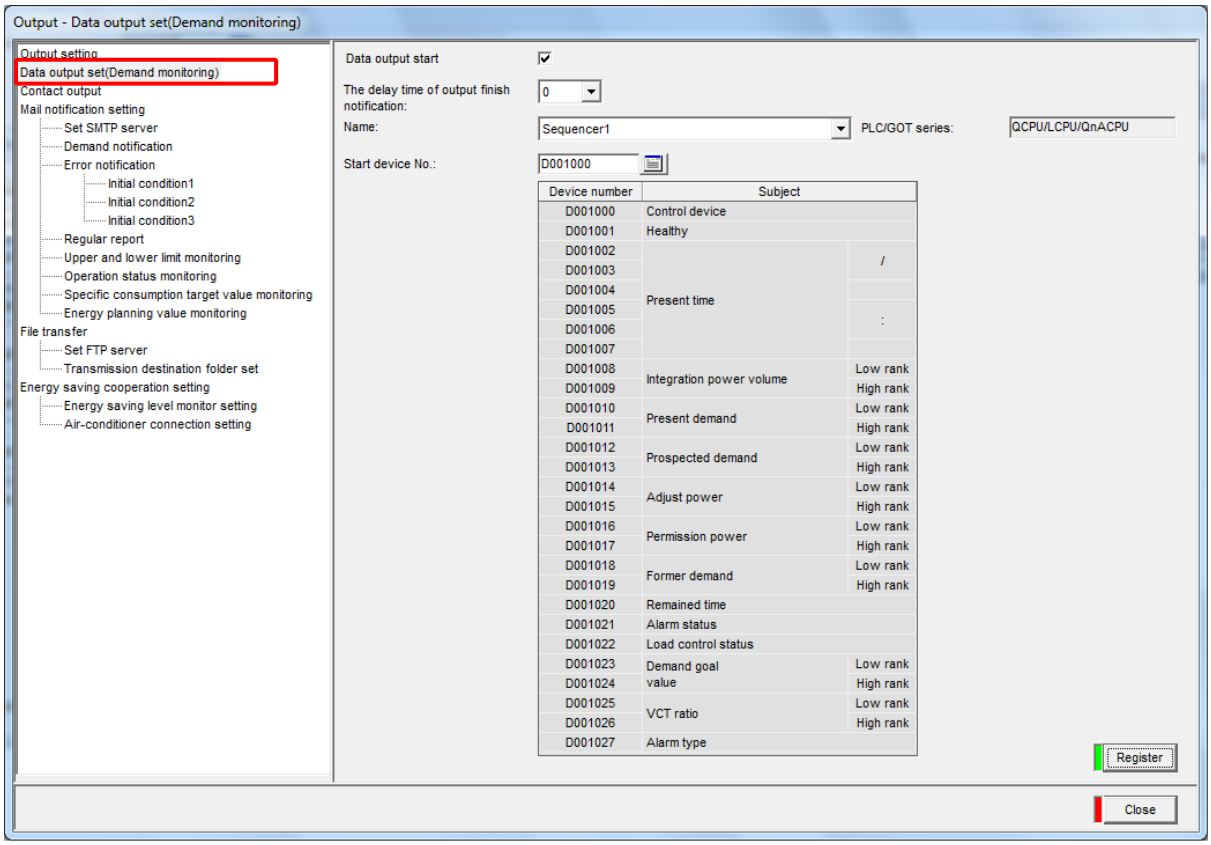


Editing the registered data output settings (demand control)

This section describes how to edit the data output setting (demand control).

1 Displaying the [Data output set (Demand control)] screen

Click the [Data output set (Demand control)] in the tree menu on the output setting screen.



2 Editing the items to be changed and registering them

Edit the item to be changed and then click the [Register] button.

* The entries and input conditions for each item are the same as registering a data output group (demand control).

4.8.3. Contact output settings

This section explains the operation procedure in the dialog box of [Contact output].
This is the setting for contact outputs of product errors and the monitoring information (upper/lower limits, operation status, specific consumption target value and energy plan value), demand control and demand control set through the dialog box of Monitoring and notification settings.
Up to 32 points can be registered for contact outputs.

*** The contact output setting for demand control and demand control are provided only with the EcoWebServerIII with demand control function.**

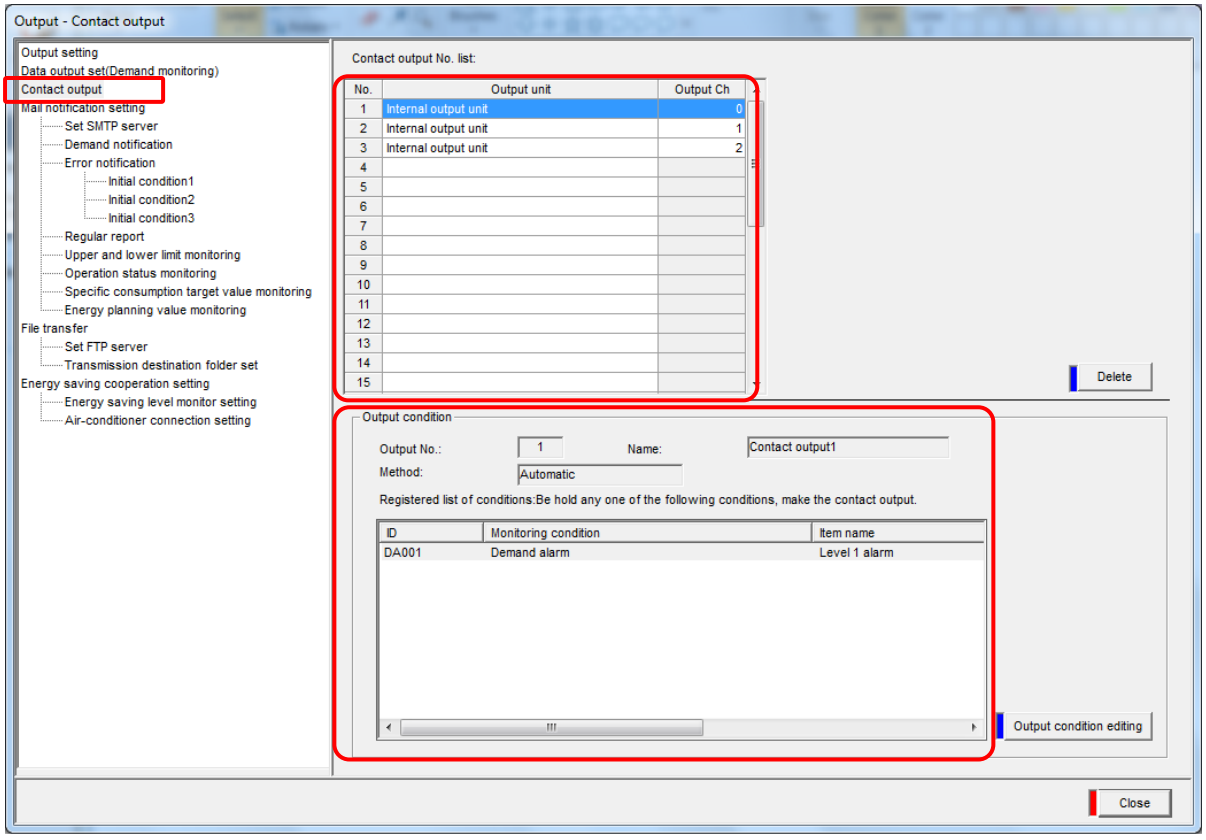
*** Separately, contact output of the following is required monitoring notification registration.**
Upper/lower limit monitoring, Operating status monitoring, Specific consumption target value monitoring, and Energy plan value monitoring.

Confirming the registered contact output settings

This section explains the procedures to display and confirm the registered contact output settings.

1 Displaying the [Contact output] screen

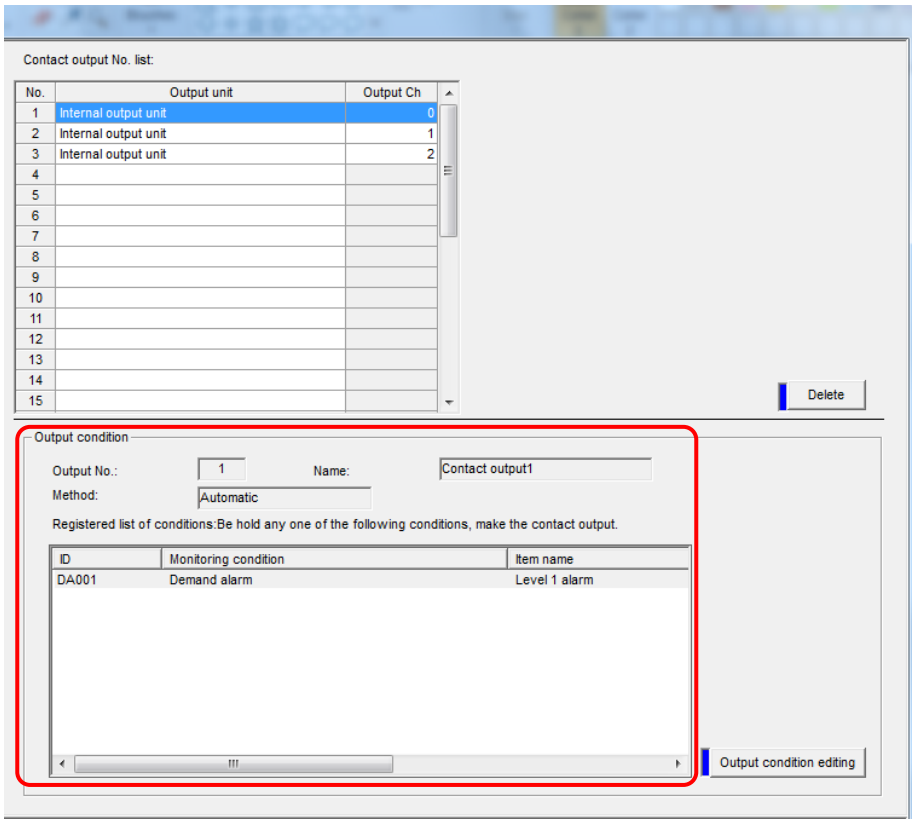
Click the [Contact output] in the tree menu on the output setting screen.



[Contact output No. list] : The list of set contact outputs is displayed.
[Output condition] : Output condition selected in the contact output No. list is displayed.

2 Confirming the output conditions

Click the line of contact output No. to be confirmed in the [Contact output No. list] in the dialog box of [Contact output].



[Output No.] : Contact output No. selected
[Name] : Contact output name of contact output No. selected
[Method] : Contact output method (one-shot (10 sec.), output condition interlocking)
Output condition interlocking : ON when the output condition is established (occurrence), and OFF when it is restored.
One-shot (10 sec.) : ON for 10 sec. only when the output condition is established (occurrence), and then OFF automatically.
Also, ON for only 10 sec. when the output condition is not established (restored), and then OFF automatically.
[Resistered list of conditions] : Output conditions registered for contact output No. selected

Registering new contact outputs

Register the output destination and the conditions of contact outputs newly.

*** With the EcoWebServerIII with demand control function, contact output No. 1 to 3 are set to as follows as the default.**

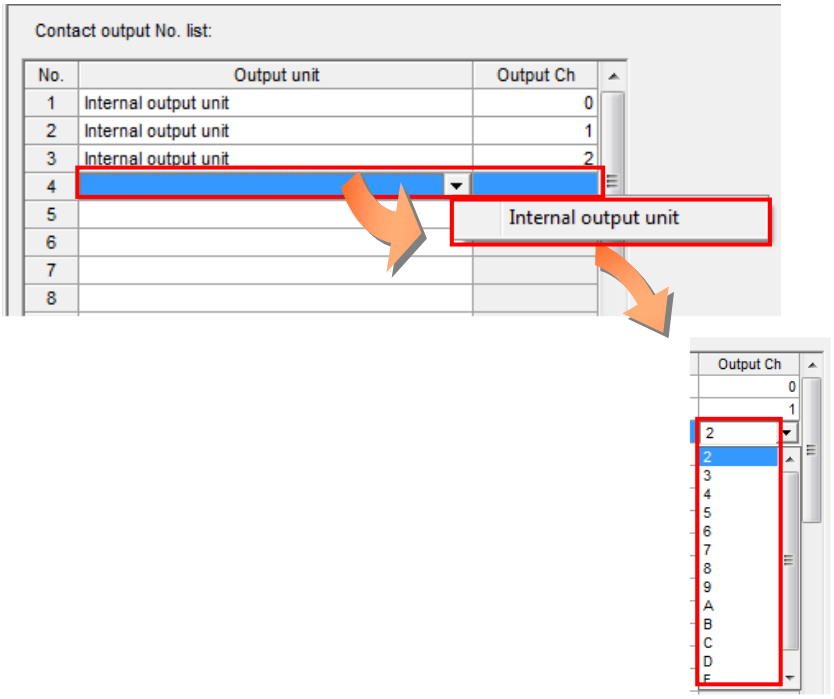
- **Contact output No. 1:**
  Internal output unit Output Ch: 0, Registered conditions: Level 1 alarm Occurrence
- **Contact output No. 2:**
  Internal output unit Output Ch: 1, Registered conditions: Level 2 alarm Occurrence
- **Contact output No. 3:**
  Internal output unit Output Ch: 2, Registered conditions: Limit/Fixed alarm Occurrence

1 Displaying the [Contact output] screen

Click [Contact output] in the tree menu on the external device coordination setting screen.

2 Setting the output destination of contact outputs

Select the line for the No. to be set from the contact output No. list.



(1) [Output unit]

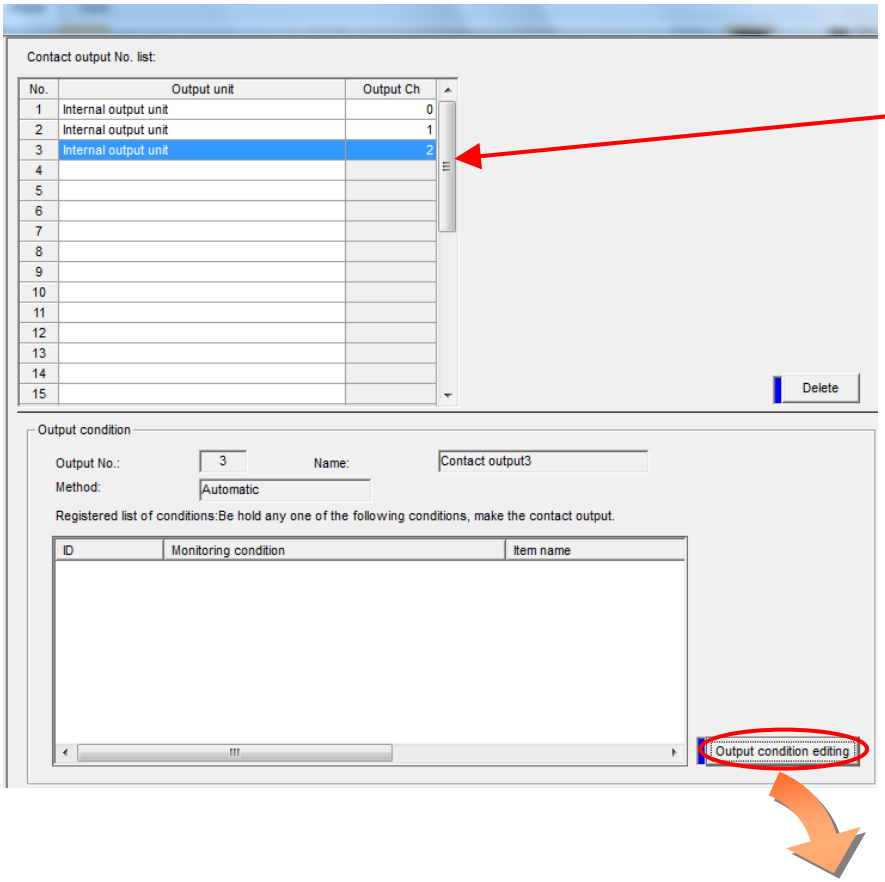
Select the contact output destination from the pull-down menu.

(2) [Output Ch]

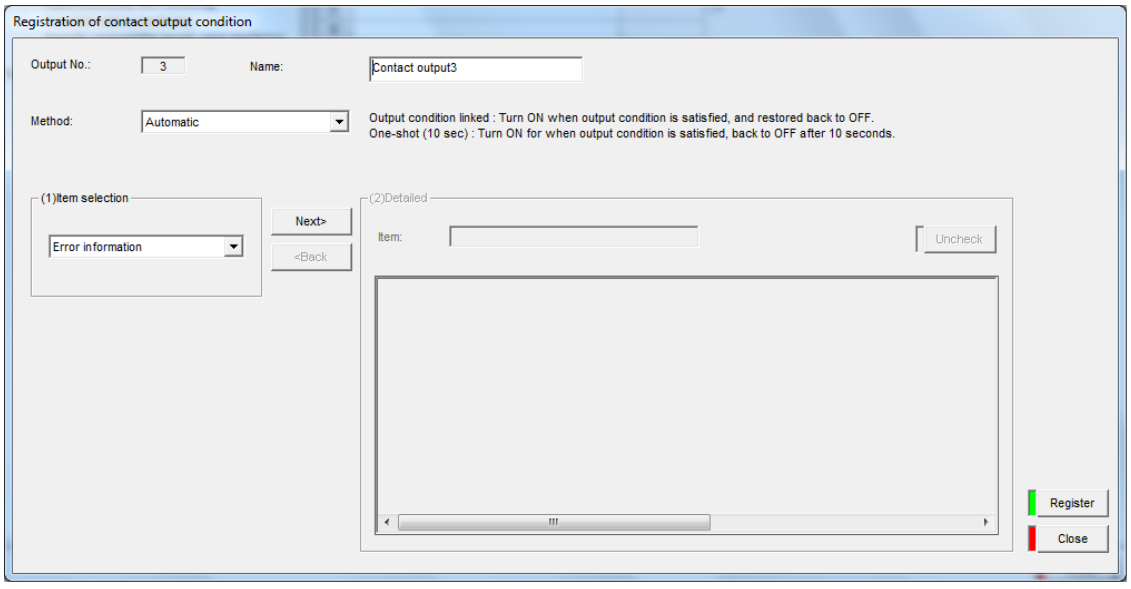
Select the Ch to output the built-in output unit. Select from the 16 channels 0 to F.
When using a digital output terminal, the selective CH will vary according to the terminal.
(Ex.: For B-DX4Y4A, Ch1 to 4 can be selected)
Channels which is already selected will not be displayed in the list.

3 Displaying the [Registration of contact output condition] screen

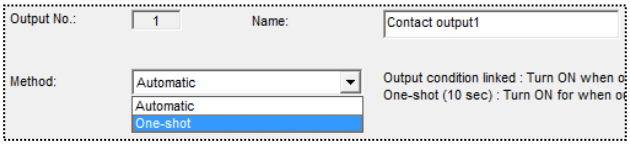
Select the line of the contact output No. you want to set the output conditions, and click the [Output condition editing] button.



Line of the contact output No. to be registered



4 Entering or selecting the items for contact output conditions



(1) [Name]

Input the contact output name.
The entry conditions are as follow:

Characters	Up to 24 characters
Prohibited characters	Prohibit registration of the following characters # ¥ / : , ; * ? " < > |

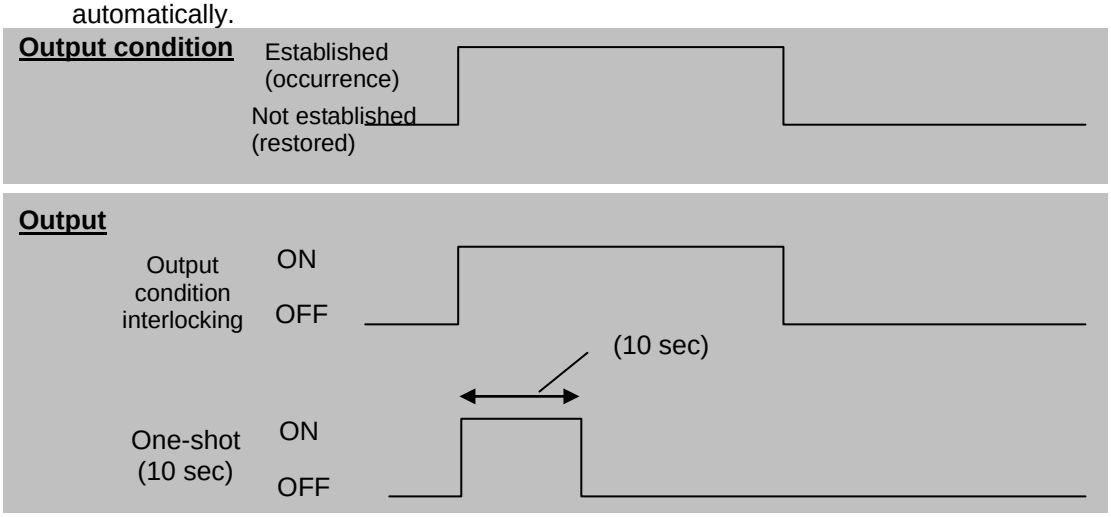
*1 If the characters are used which are listed in the table of prohibited characters in the appendix, these may not be displayed correctly in the browser of EcoWebServerIII.

*2 Duplicated registration of the contact output name is prohibited.

(2) [Method]

Select the contact output method from the following two methods.

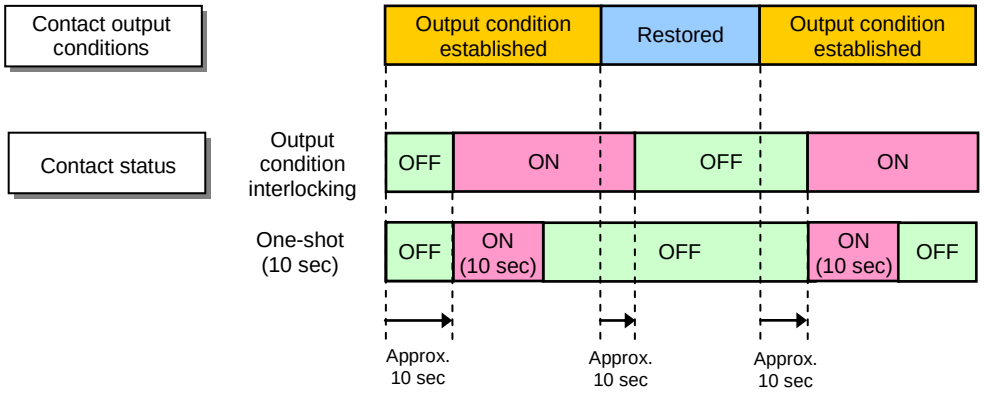
Automatic: ON when the output condition is established (occurrence), and OFF when it is restored.
One-shot : ON for 10 sec. only when the output condition is established (occurrence), and then OFF automatically.
ON for 10 sec. only when the output condition is not established (restored), and then OFF automatically.



✓Additional information:

About contact output method

It may take 10 seconds around until the contact output turns ON after the output condition is established (occurrence).
It also may take 10 seconds around until the contact output turns OFF after restoration.
Remember such the delay.



*When occurrence/restored within 10 seconds after contact output of one-shot, contact output is may not ON.

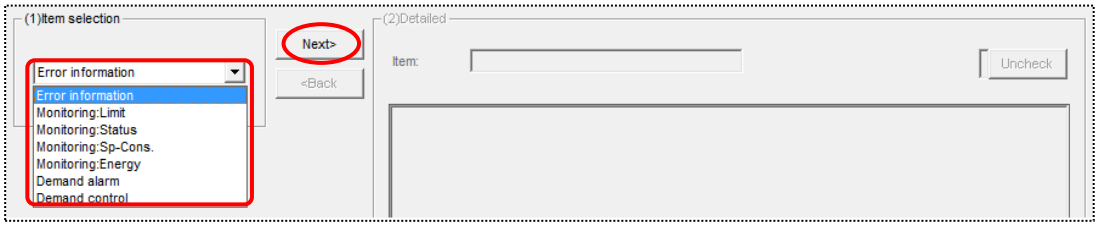
5 Selecting the contact output conditions

Select the conditions that can change the contact status to ON.

(1) Selecting the large item

Select the large item (error information, Monitoring: Limit, Monitoring: Status, Monitoring: Sp-Cons., Monitoring: Energy, Demand alarm, demand control) in the monitoring settings, and click the [Next>] button.

*** The demand control and demand control are displayed only with the EcoWebServerIII with demand control function.**



(2) Selecting the detail item

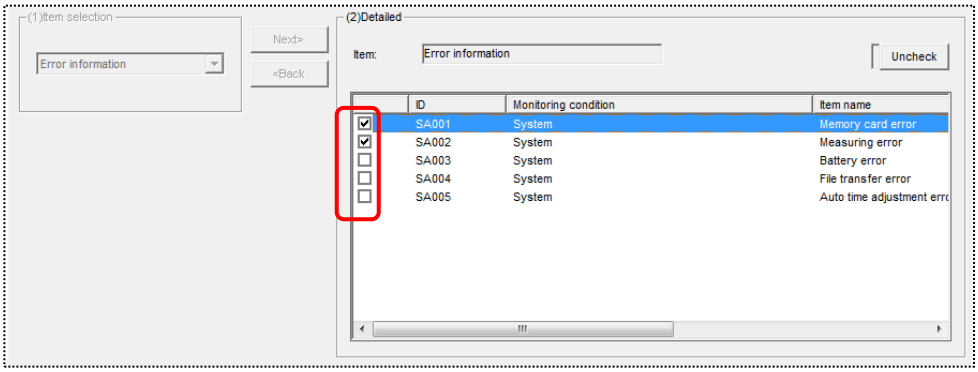
The detail item list of the selected large item is displayed. Click the detail item to be registered in the output conditions to put it on the checkmark.

*1 If selecting multiple items, and at least one on them is established from the conditions, the contact output is activated.

*2 10 of the detail items can be registered for a single contact output (demand alarm/control is only 1).

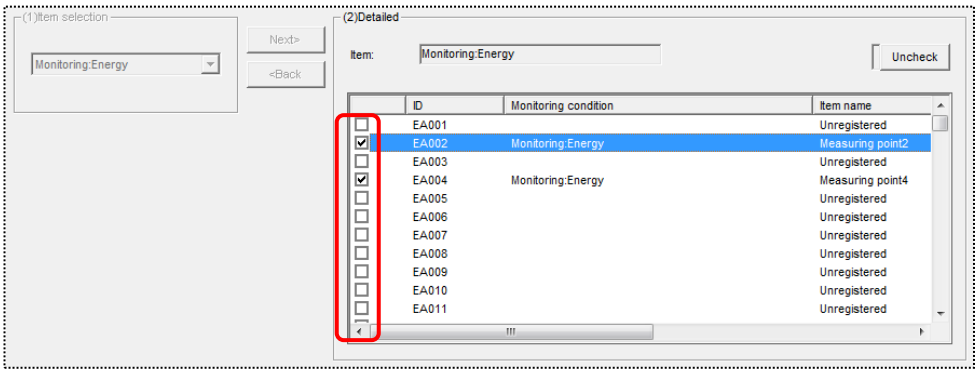
*3 Any detail items belonging to the other large item cannot be registered for a single contact output.

<Error information>



Detail item: memory card error, Measuring error, Battery error, File transfer error and Auto time adjustment error

< Monitoring: Limit, Monitoring: Status, Monitoring: Sp-Cons., Monitoring: Energy >

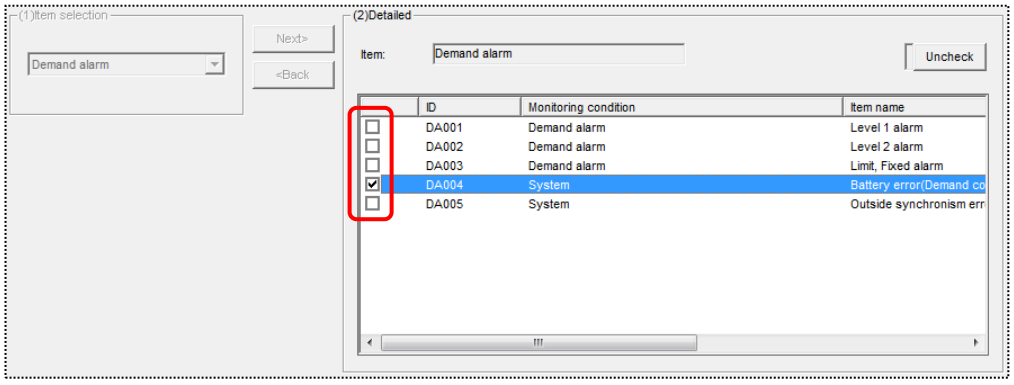


Detail item: Items registered in the dialog box of Monitoring and notification settings

* For the lines that the monitoring and notification settings are not registered, those lines are displayed as Monitoring condition: " " (blank) and Item name: "Not registered".

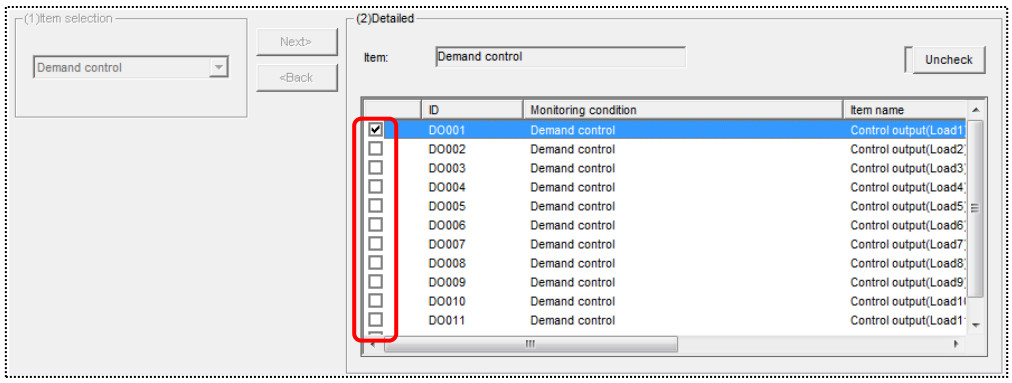
* Separately, monitoring registration is required.
  ☞ (Refer to [**4.8.8 Upper/lower limit monitoring registration], [4.8.9 Operating status monitoring registration], [4.8.10 Specific consumption target value monitoring registration**], [**4.8.11 Energy plan value monitoring registration**])

<Demand alarm> (Only on EcoWebServerIII with demand control function)



Detail item: Level 1 alarm, Level 2 alarm, limit/fixed alarm, battery error (demand control unit) and error: demand time limit adjustment by external pulse signal
*Do not select more than one item in demand control.
(If multiple items are selected, contact output is not correctly when it is restored.)

<Demand control> (Only on EcoWebServerIII with demand control function)



Detail items: (Control output 1 load name) to (Control output 12 load name)
*Do not selectedmore than one item in demand control.

To re-select the large item:

Clear all the checkmarks put on the detail items, and then the [<Back] button become active.
Click the [<Back] button to back to the large item selection, and then select again.

* Click the [Uncheck] button to release all the checked detail items.

7 Registering

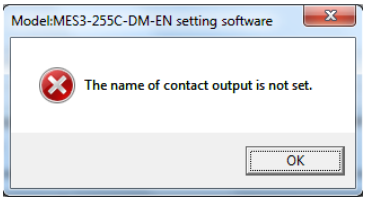
Click the button in the dialog box of [Registration of contact output condition] to register.

[Register] button : Register the set contact output conditions

[Close] button : Back to the dialog box of [Contact output]

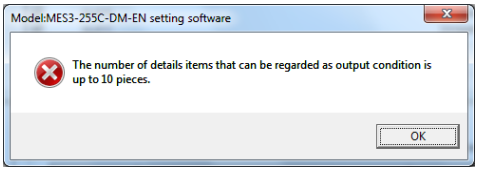
*1 If the set details are not proper, an error message as shown on the right is displayed when clicking the [Register] button according to the error details. Reset the details so as to meet the conditions of each item.

(Example of display)



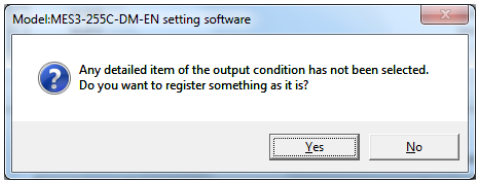
*2 If more than 10 detail items have been registered in the contact output conditions, the error message shown on the right.

Limit the number of selecting detail items to within 10.


Model:MES3-255C-DM-EN setting software
The number of details items that can be regarded as output condition is up to 10 pieces.
OK

*3 If clicking the [Register] button while no detail item has been selected, the message shown on the right is displayed.

If clicking the [Yes] button, only the contact output name is registered as “No output condition”.

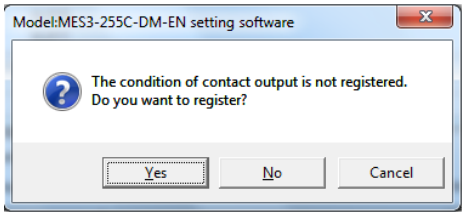

Model:MES3-255C-DM-EN setting software
Any detailed item of the output condition has not been selected.
Do you want to register something as it is?
Yes
No

*4 After modification of entry details of each item, click the [Close] button instead of clicking the [Register] button, the message shown on the right is displayed.

[Yes] button : To register

[No] button : Not to register.

[Cancel] button : Back to the dialog box of [Registration of contact output conditions]



Deleting the registered contact output

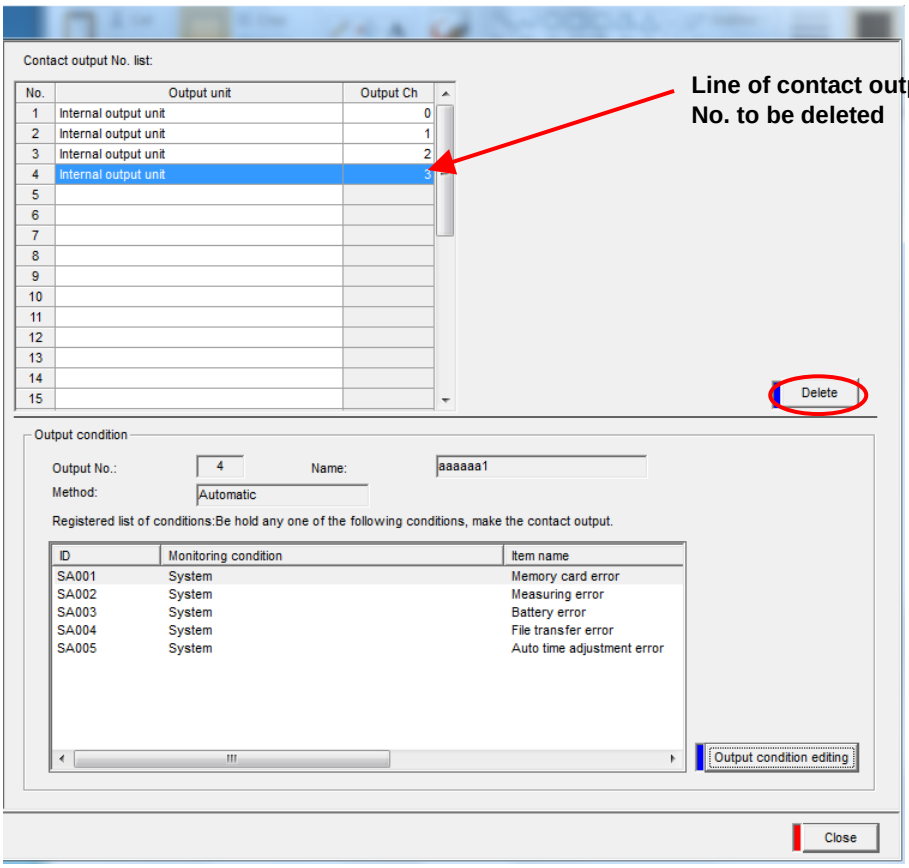
This section explains the procedure to delete the registered contact output.

1 Displaying the [Contact output] screen

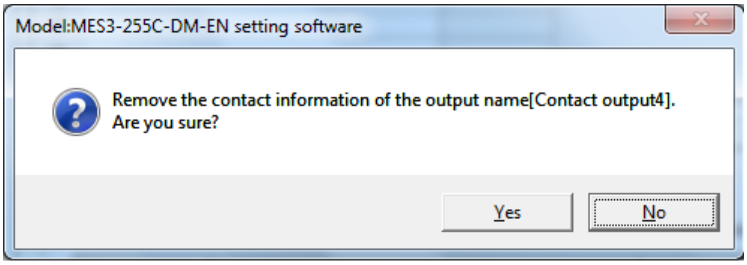
Click the [Contact output] in the tree menu on the external device coordination setting screen.

2 Selecting the contact output No. to delete

Select the line of contact output No. to be deleted and click the [Delete] button.



The following message appears. Click the [Yes] button.



Remarks

- The contact output No. can also be deleted by clicking the right-click menu [Delete] or pressing the [Delete] key.

Editing the registered contact outputs

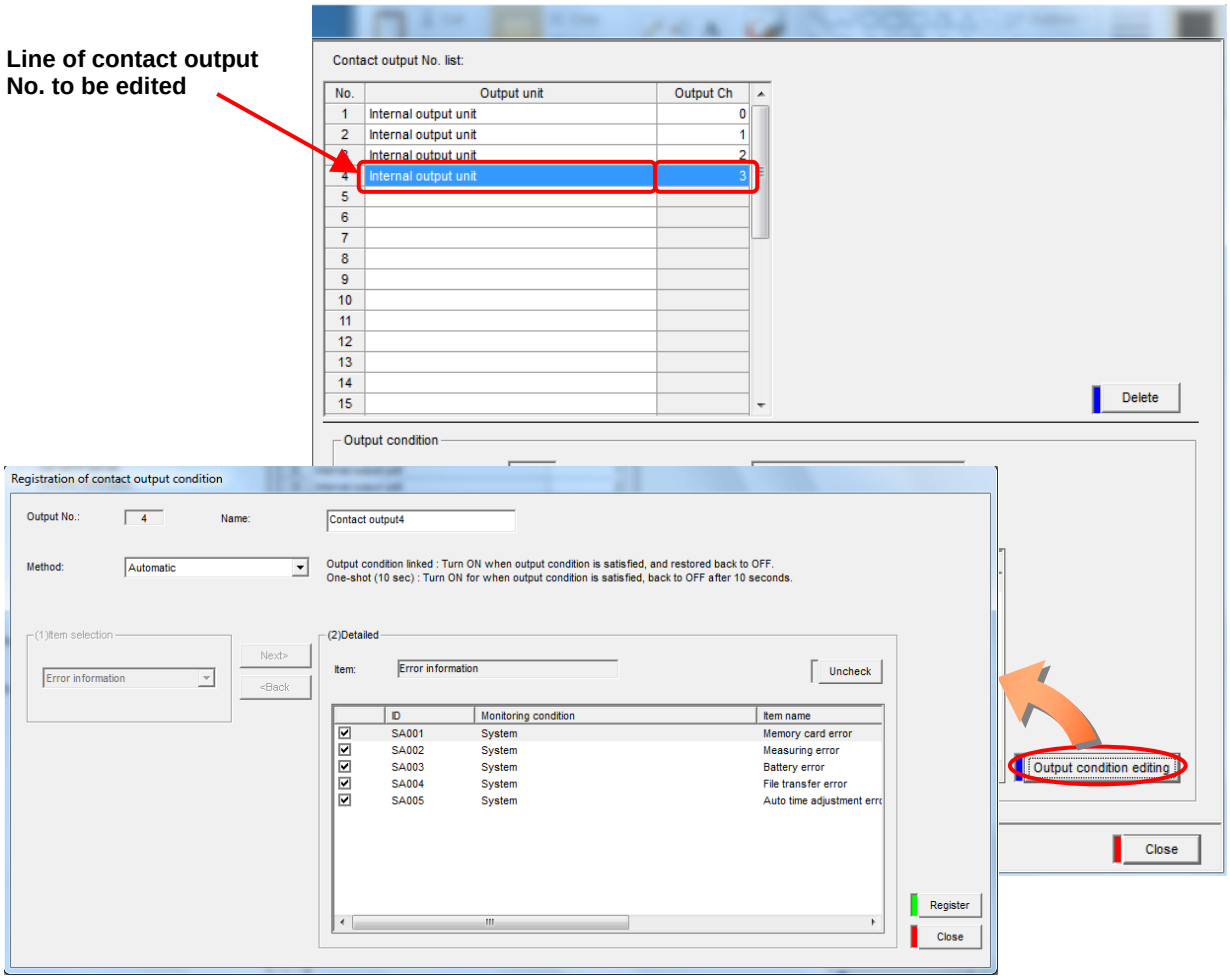
This section describes the procedures for changing a registered contact output (Output unit, output Ch, Name, Method, Output conditions).

1 Displaying the [Contact output] screen

Click the [Contact output] in the tree menu on the external device coordination setting screen.

2 Selecting the contact output No. to edit

Select the line of the contact output No. to be edited, and click the [Output condition editing] button.



3 Editing the items to be changed and registering them

Edit the item to be changed and then click the [Register] button.

* The input information and input conditions for each item are identical to those for new registration of the contact output conditions.

Remarks

- Change the output unit and output Ch from the [Contact output No. list] pull-down menu.

4.8.4. SMTP server settings

This section describes the procedures for setting the [Set SMTP server].

∗ For installing and setting the SMTP (mail) server and inquiring technical questions about it, consult with your network administrator (or an applicable department of your company).

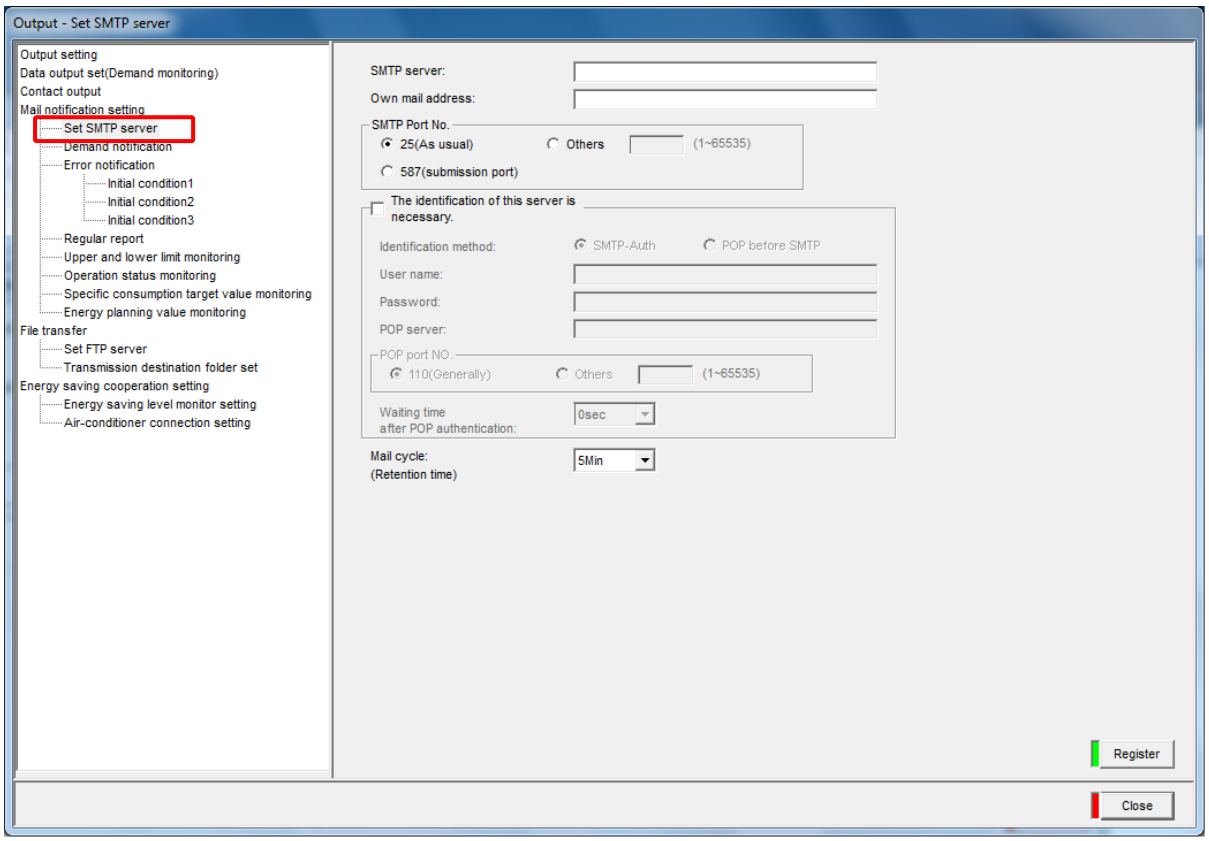
Set the SMTP server

Set the SMTP server.

* This is the required setting item for mail notification.

1 Displaying the [Set SMTP server] screen

Click on [Set SMTP server] in the tree menu on the [Output] screen.



Remarks

- The mail transmission function supports SMTP sever (SMTP-Auth or POP before SMTP) requiring authorization.

2 Specifying the SMTP server

Input a domain name or IP address of the SMTP (mail) server from the keyboard.

- For inputting a domain name

Characters	Up to 50 characters
Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |

* Setting of the DNS server is required.

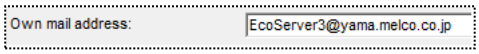
- For inputting an IP address

Input range	0 to 255
Values prohibited to register	0.0.0.0, xxx.xxx.xxx.255 (xxx: any numerical value)

3 Inputting the own mail address

Input the own mail address (EcoWebServerIII) from the keyboard.

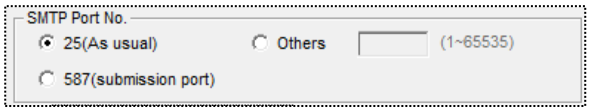
The mail address set here is the mail notification source address.



Characters	Up to 50 characters
Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |

4 Specifying the port No.

Specify the port No. for accessing the SMTP (mail) server.

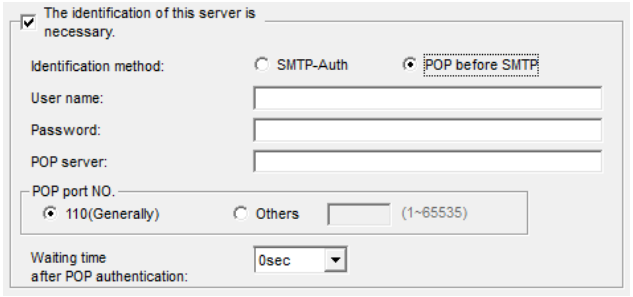


Select from 25, 587 or "Others".

When "Others" is selected, enter the port No. The range is 1 to 65535.

5 Specifying the authorization method (When authorization method is SMTP-Auth)

Specify the authorization when accessing a SMPT (mail) server set to SMPT-Auth authorization method.



Check [The identification of this server is necessary].

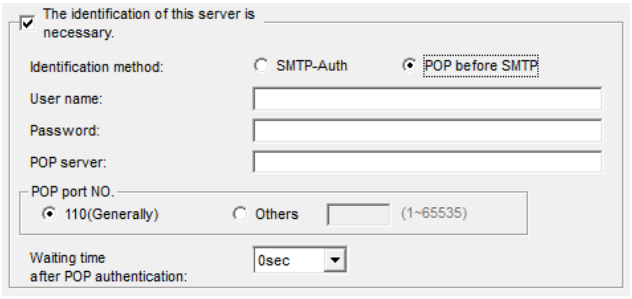
Select [SMTP-Auth] for authorization method.

Enter "Login ID" for SMTP server.
(Up to 16 characters)

Enter "Password" for SMTP server.
(Up to 16 characters)

6 Specifying the authorization method (When authorization method is POP before SMTP)

Specify the authorization when accessing a SMPT (mail) server set to POP before SMTP authorization method.



Check [The identification of this server is necessary].

Select [POP before SMTP] for authorization method.

Enter "Login ID" for SMTP server.
(Up to 16 characters)

Enter "Password" for SMTP server.
(Up to 16 characters)

Enter "Domain name" or "IP address" for POP server.

Select the port No. for accessing the POP server to 110 or "Others".

When "Others" is selected, enter the port No. The range is 1 to 65535.

Select the "Waiting time after POP authentication" from 0 to 15 seconds (1 second increments).

7 Selecting the mail transmission cycle (retention time)

Select the mail transmission cycle (retention time).
The notifications that occur during the retention time are held in the EcoWebServerIII until the next transmission cycle comes.

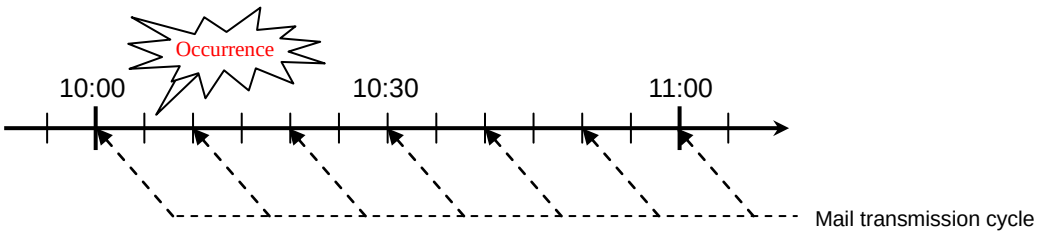
Selection range [5 Min.], [10 Min.], [15 Min.], [30 Min.], [60 Min.]
Default value [5 Min.]

* The setting of mail transmission cycle (retention time) is effective only for the notifications of which check boxes [Suspend] in the [Enter demand notification] dialog box are checked. The notifications of which check boxes [Suspend] in the [Enter demand notification] dialog box are not checked are notificated by mail to the SMTP server immediately after the notification conditions are established.

<About mail transmission cycle (retention time)>

The mail transmission timing varies as follows depending on the checked or unchecked status of the [Suspend] check box.

[Example] Set time: 10 min.



"The monitoring and notification conditions are established (error occurrence) between 10:00 and 10:10."

* Notification without the checkmark on the [Suspend] check box → It is transmitted by mail immediately.

* Notification with the checkmark on the [Suspend] check box → Its transmission is held until the next transmission cycle. (It is transmitted at 10:10.)

8 Registering

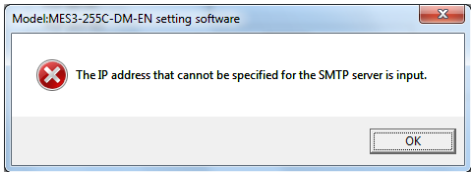
Click the button on the [Set SMTP server] dialog box to register.

[Register] button : Register the SMTP server setting information as the set details.

[Close] button : Back to the project setting dialog box.

*1 If the set details are not proper, an error message as shown on the right is displayed when clicking the [Register] button according to the error details.
Reset the details so as to meet the conditions of each item.

(Example of display)

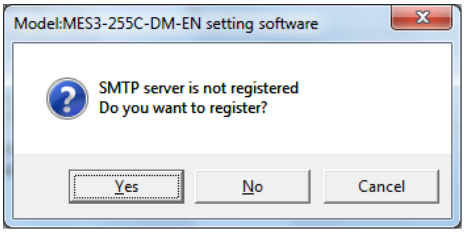


*2 After modification of entry details of each item, click the [Close] button instead of clicking the [Register] button or another tree menu is selected, the message shown on the right is displayed.

[Yes] button : To register

[No] button : Not to register

[Cancel] button : Back to [Set SMTP server] dialog box.



Remarks

- When designating the SMTP server by domain name, make sure to set up the DNS server.
  (☞ Refer to 4.7.1 IP address settings, Configuring the DNS server.)
  * **For installing and setting the DNS server (name server) and inquiring technical questions about it, consult with your network administrator (or an applicable department of your company).**

4.8.5. Demand notification (Only with models provided with demand control function)

This section describes the operations for [Demand notification].
When registered as a demand notification, a mail notice can be sent out when one of the following events occurs.

Level 1 alarm occurrence, Level 1 alarm recovery
Level 2 alarm occurrence, Level 2 alarm recovery
Limit/fixed alarm occurrence, Limit/fixed alarm recovery
Battery error (demand control unit) occurrence
Demand time limit adjustment by external pulse occurrence, Demand time limit adjustment by external pulse recovery
Demand control error occurrence

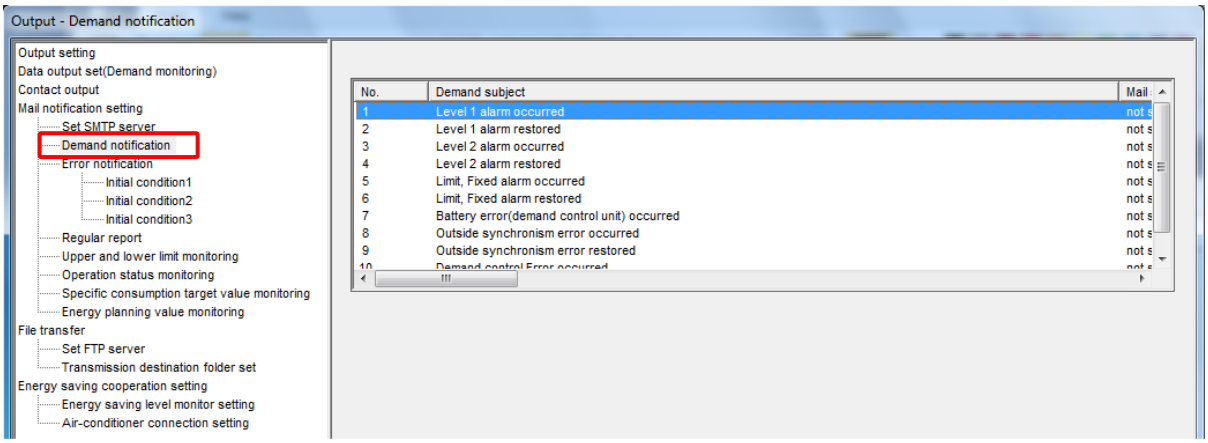
*** The demand notification registration function is available only for the EcoWebServerIII with demand control function.**

Checking the list of registered demand notifications

This section explains the procedures for displaying and confirming the list of registered demand notifications.

1 Displaying the [Demand notification] screen

Click the [Demand notification] in the tree menu on the [Output] screen.



2 Checking the registration information

Check the following information displayed in the list.

[No.]	: Demand notification No.
[Demand subject]	: Name of notification item monitored by demand notification mail
[Mail sending]	: Active or inactive state of demand notification (by mail)
[Suspend]	: Active or inactive state of temporarily holding of mail transmission
[Send To]	: Destination address of demand notification mail
[Subject]	: Subject of demand notification mail
[Body]	: Text of demand notification mail

Registering the demand notification

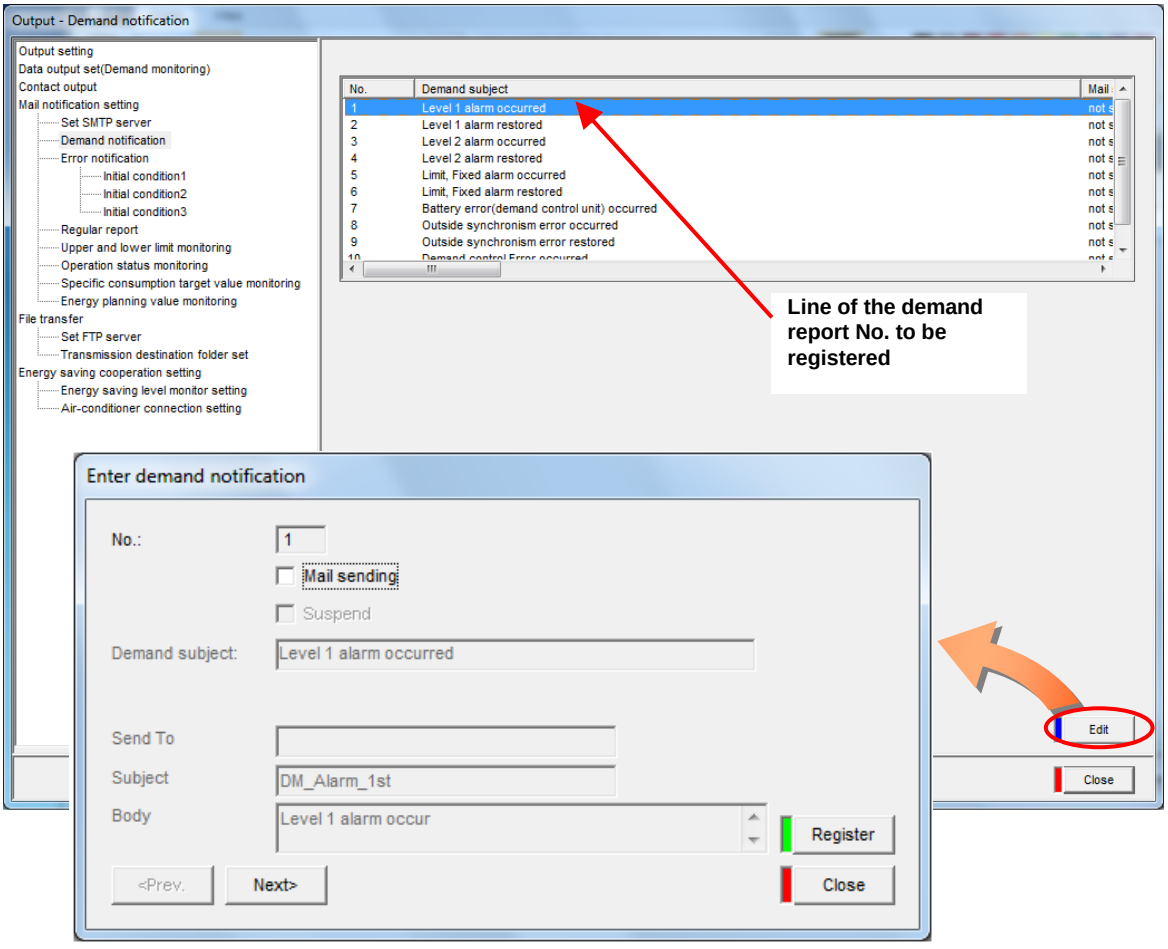
This section describes the procedures for registering a demand notification (mail transmission).

1 Displaying the [Demand notification] screen

Click the [Demand notification] in the tree menu on the external device coordination setting screen.

2 Displaying the [Enter demand notification] screen

Double-click the line of the demand notification No. to be registered on the [Demand notification] screen or select the line of the demand notification No. to be registered, and click the [Edit] button.



3 Setting the active/inactive status of notification

(1) To send a demand notification mail, check [Mail sending].

(2) To temporarily hold the mail, check [Suspend].

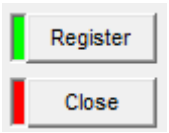
4 Setting the destination address, subject and text of the mail notification

Set these items only if checked the [Mail sending] check box. Input conditions are as follows.

[Send to]	Characters	Up to 50 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |
[Subject]	Default	* Follows each notification item
	Characters	Up to 30 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |
[Body]	Characters	Up to128 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |

5 Registering

Click the button on the [Enter demand notification] dialog box to register.

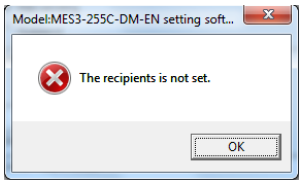


[Register] button : Register the set demand notification information.

[Close] button : Back to the [Demand notification] dialog box.

*1 If the set details are not proper, an error message as shown on the right is displayed when clicking the [Register] button according to the error details. Reset the details so as to meet the conditions of each item.

(Example of display)

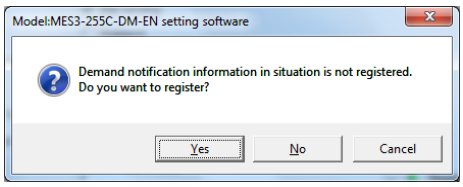


*2 After modification of entry details of each item, click the [< Prev.], [Next>] or [Close] button instead of clicking the [Register] button, the message shown on the right is displayed.

[Yes] button : To register

[No] button : Not to register.

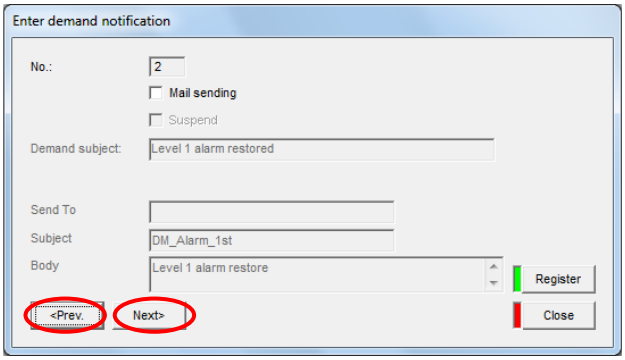
[Cancel] button : Back to [Enter demand notification] dialog box



<For continuous registration of demand notification >

For continuous registration of demand notification, click the [< Back] button and [Next>] button and repeat the steps from 3 to 5.

To confirm, delete or change the previous registration of demand notification, click the [<Prev.] button.
To confirm, delete or change the next registration of demand notification, click the [Next>] button.



Editing the registered information of a registered demand notification

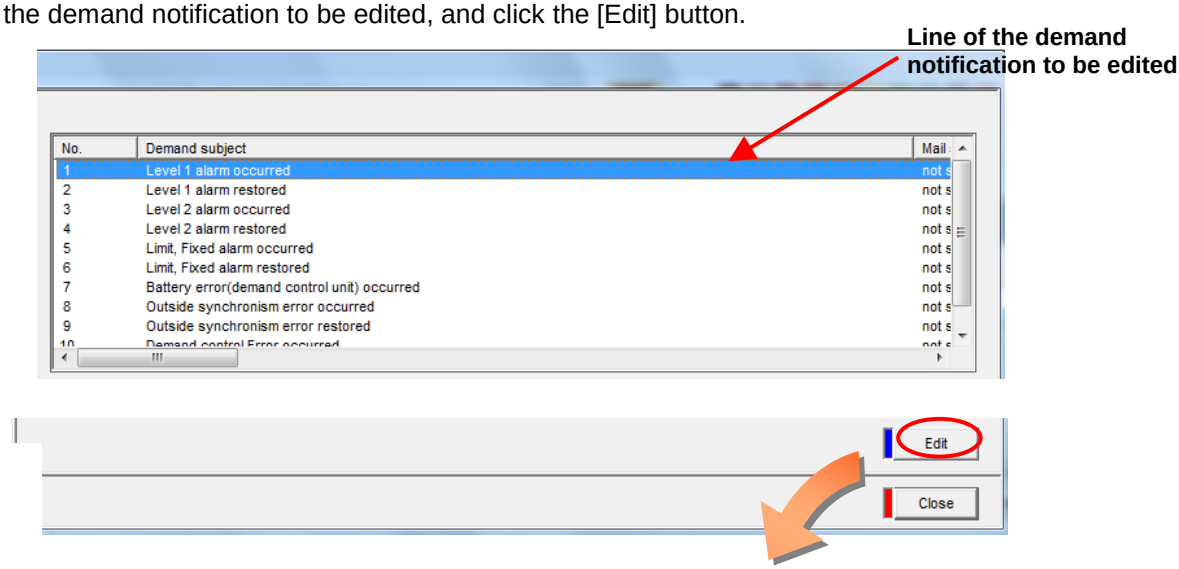
This section describes the procedures for editing the registered information of a demand notification.

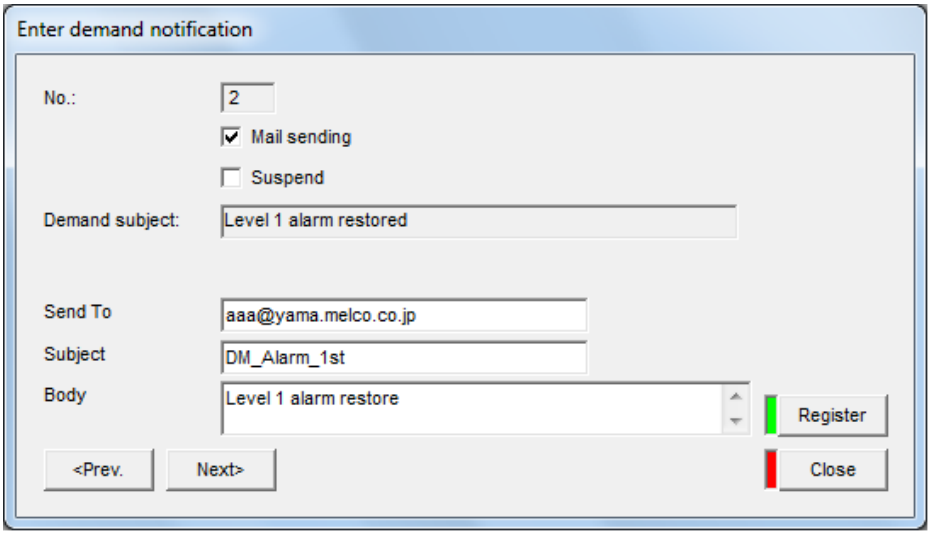
1 Displaying the [Demand notification] screen

Click the [Demand notification] in the tree menu on the [Output] screen.

2 Selecting the demand notification to be edited, and clicking the [Edit] button

Double-click the line of the demand notification to be edited on the [Demand notification] screen or select the line of the demand notification to be edited, and click the [Edit] button.


Line of the demand notification to be edited
No.
Demand subject
Mail
1 Level 1 alarm occurred
2 Level 1 alarm restored
3 Level 2 alarm occurred
4 Level 2 alarm restored
5 Limit, Fixed alarm occurred
6 Limit, Fixed alarm restored
7 Battery error(demand control unit) occurred
8 Outside synchronism error occurred
9 Outside synchronism error restored
Edit
Close



3 Editing the items to be changed and registering them

Edit the item to be changed and then click the [Register] button.

* The entries and input conditions for each item are the same as registering a demand notification.

4.8.6. EcoWebServerIII error notification settings

This section describes the procedures for setting [Error notification (initial condition 1, 2, 3)].

Setting EcoWebServerIII error information to mail notification (initial conditions 1 to 3)

Perform the mail notification settings so as to transmit the notification at the startup of EcoWebServerIII and error occurrence.

The following table shows the information (initial conditions 1, 2 and 3) that can be set to the notification able errors.

Monitoring/notification items		Condition for occurrence	Setting for [Monitoring]	Setting for [Notification]
Initial condition 1				
	Startup	At startup of EcoWebServerIII	–*	Refer to the procedure 2 (1-1).
	Memory card error	When CF (CompactFlash) card data write failed.	–*	Refer to the procedure 2 (1-2).
	Measuring error	When communication with the terminal failed.	Refer to the procedure 2 (3).	Refer to the procedure 2 (1-3).
Initial condition 2				
	File transfer error	When file transmission to the FTP server failed.	–*	Refer to the procedure 2 (2-1).
	Auto time adjustment error	When automatic time adjustment with the SNTP server failed.	–*	Refer to the procedure 2 (2-2).
	Battery error	When the battery capacity of the EcoWebServerIII is lowered.	–*	Refer to the procedure 2 (2-3).
Initial condition 3				
	Data output error	When data output to PLC device failed.	Refer to the procedure 2 (3-1).	Refer to the procedure 2 (3-1).

*** Startup, memory card error, file transfer error, auto time setting error and battery error are set to be monitored as the required monitoring items.**

Remarks

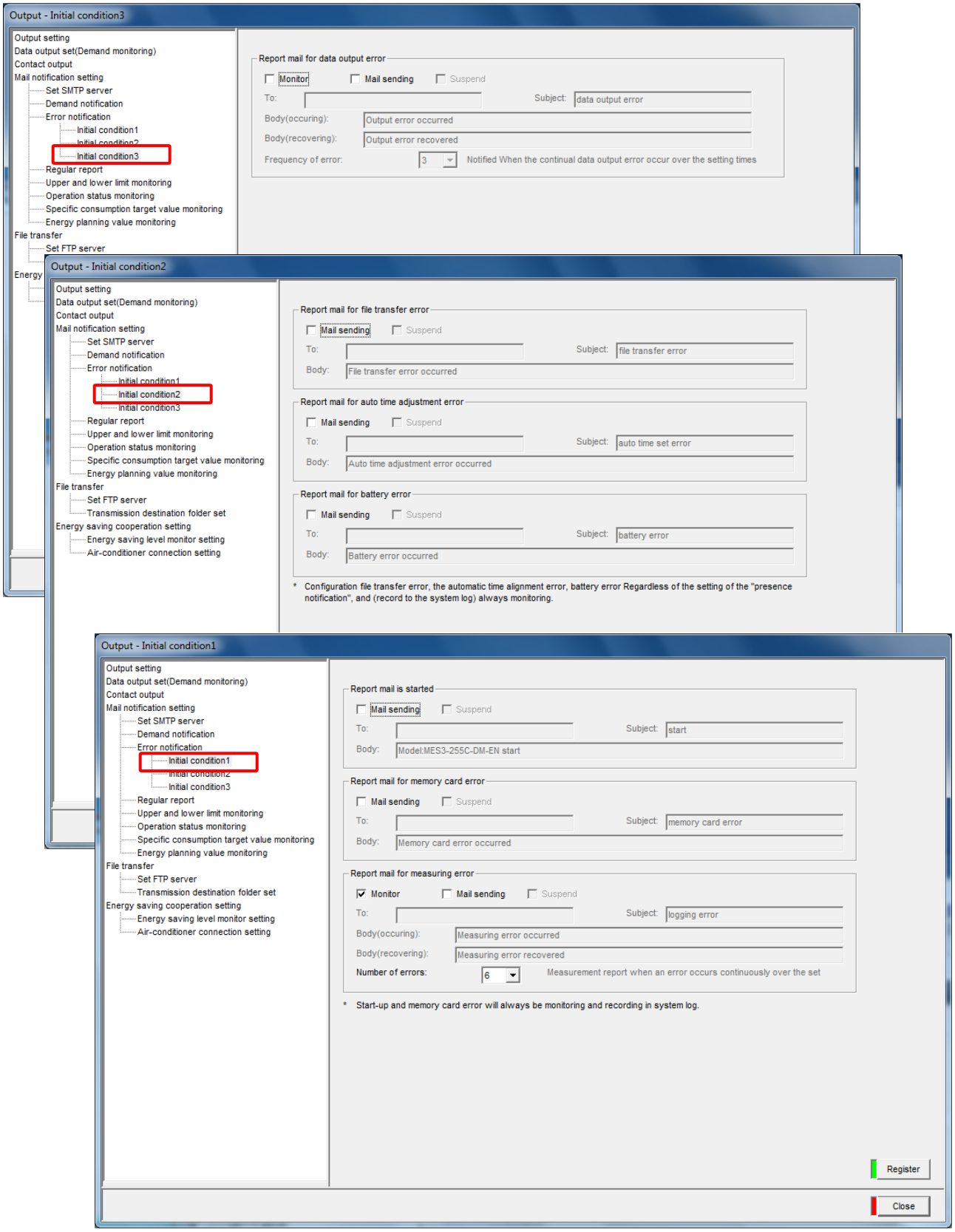
How different between "monitoring" and "notification"?
Monitoring : Records the error in the system log when it occurs.
Notification : Records the error in the system log when it occurs and notifications the error as the set details by mail.

Remarks

- Need to reset the EcoWebServerIII, in order to recover from [memory card error] and [auto time adjustment error].

1 Displaying the [Error notification] screen (initial conditions 1, 2, 3)

Click [Initial condition 1], [Initial condition 2] or [Initial condition 3] in the tree menu on the [Output] screen.



2 Inputting the information of each monitoring and report item

(1) Setting items on initial condition 1 screen

(1-1) Startup

(1) To transmit the startup report mail, check the [Mail sending] check box of the [Report mail is started] area.
(2) To hold the mail temporarily, check the [Suspend] check box.
(3) Input the address, subject and body. Input conditions are as follows:

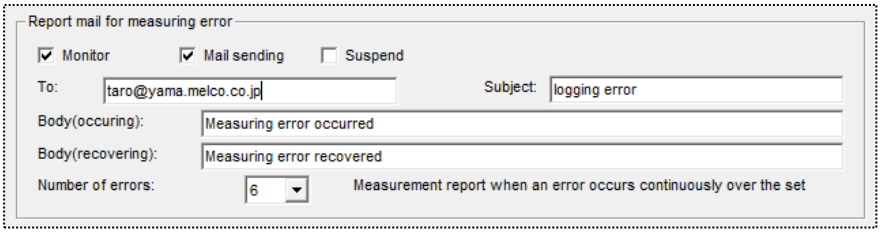
[To]	Characters	Up to 50 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |
[Subject]	Default	start
	Characters	Up to 30 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |
[Body]	Default	Model: MES3-255C-EN start.
	Characters	Up to 128 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |

(1-2) Memory card error

(1) To transmit the memory card error report mail, check the [Mail sending] check box of the [Report mail for memory card error] area.
(2) To hold the mail temporarily, check the [Suspend] check box.
(3) Input the address, subject and body. Input conditions are as follows:

[To]	Characters	Up to 50 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |
[Subject]	Default	memory card error
	Characters	Up to 30 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |
[Body]	Default	Memory card error
	Characters	Up to 128 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |

(1-3) Measuring error



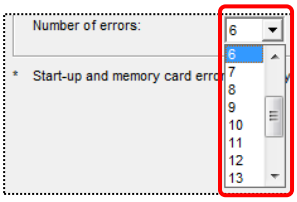
(1) Check the [Monitor] check box in the [Report mail for measuring error] area to monitor the measurement error only (i.e., record the system log only), and check the [Mail sending] check box in the [Report mail for measuring error] area to transmit the measurement error report mail.
   * **When the [Mail sending] check box is checked, the checkmark is put on the [Monitor] check box automatically.**

(2) To hold the mail temporarily when [Mail sending] is selected, check the [Suspend] check box.

(3) Input the address, subject and body. Input conditions are as follows:

[Address]	Characters	Up to 50 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |
[Subject]	Default	logging error
	Characters	Up to 30 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |
[Body (occurrence)] [Body (recovery)]	Default	Occurrence : occurring measuring error Recovery : recovering measuring error
	Characters	Up to 128 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |

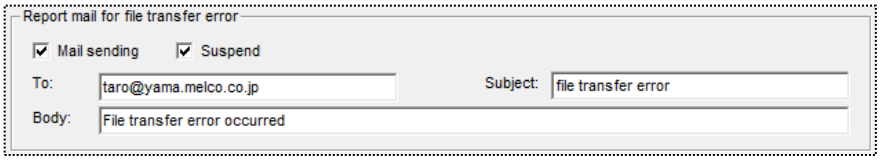
(4) Select the number of measuring error occurrence times.
When the measurement errors occurred continuously by more than the set [Number of errors], monitoring and report are performed.



Selection range [1] to [18] times
Default value [6] times

(2) Setting items on initial condition 2 screen

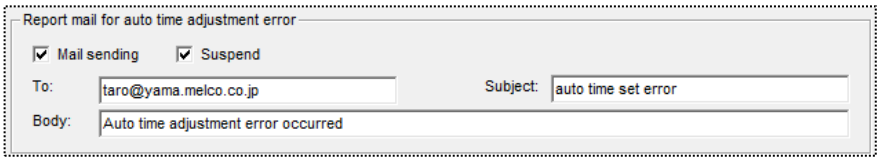
(2-1) File transfer error



(1) To transmit the file transfer error report mail, check the [Mail sending] check box of the [Report mail for file transfer error] area.
(2) To hold the mail temporarily, check the [Suspend] check box.
(3) Input the address, subject and body. Input conditions are as follows:

[To]	Characters	Up to 50 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |
[Subject]	Default	file transfer error
	Characters	Up to 30 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |
[Body]	Default	Occurrence of file transfer error
	Characters	Up to 128 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |

(2-2) Auto time adjustment error



(1) To transmit the file auto time setting error report mail, check the [Mail sending] check box of the [Report mail for adjustment error of auto time] area.
(2) To hold the mail temporarily, check the [Suspend] check box.
(3) Input the address, subject and body. Input conditions are as follows:

[To]	Characters	Up to 50 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |
[Subject]	Default	auto time set error
	Characters	Up to 30 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |
[Body]	Default	Occurrence of auto time checking error
	Characters	Up to 128 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |

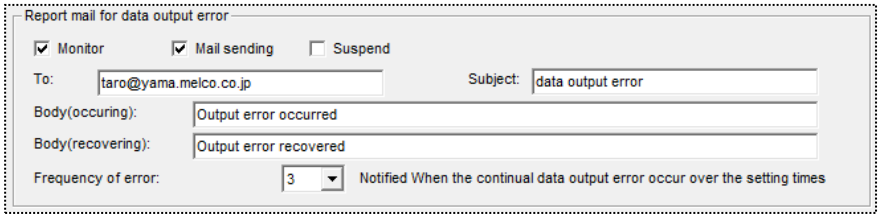
(2-3) Battery error

(1) To transmit the battery error report mail, check the [Mail sending] check box of the [Report mail for battery error] area.
(2) To hold the mail temporarily, check the [Suspend] check box.
(3) Input the address, subject and body. Input conditions are as follows:

[To]	Characters	Up to 50 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |
[Subject]	Default	battery error
	Characters	Up to 30 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |
[Body]	Default	Occurrence of battery error
	Characters	Up to 128 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |

(3) Setting items on initial condition 3 screen

(3-1) Data output error



(1) Check the [Monitor] check box in the [Report mail for data output error] area to monitor the data output error, and check the [Mail sending] check box in the [Report mail for data output error] area to transmit the data output error report mail.
   * When the [Mail sending] check box is checked, the checkmark is put on the [Monitor] check box automatically.

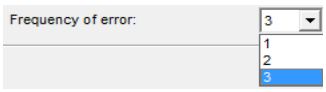
(2) To hold the mail temporarily, check the [Suspend] check box.

(3) Input the address, subject and body. Input conditions are as follows:

[To]	Characters	Up to 50 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |
[Subject]	Default	data output error
	Characters	Up to 30 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |
[Body (occuring)] [Body (recovering)]	Default	Occurrence: occurring data output error Recovery : recovering data output error
	Characters	Up to 128 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |

(4) Select the number of data output error occurrence times.

When the data output errors occurred continuously by more than the set [Frequency of error], monitoring and report are performed.



Selection range [1] to [3] times
Default value [3] times

3 Registering

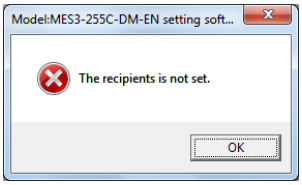
Click the button in the dialog box of [Initial condition 1], [Initial condition 2] or [Initial condition 3] to register.

[Register] button : Register the error report settings as the set details.

[Close] button : Back to the project setting dialog box.

*1 If the set details are not proper, an error message as shown on the right is displayed when clicking the [Register] button according to the error details. Reset the details so as to meet the conditions of each item.

(Example of display)

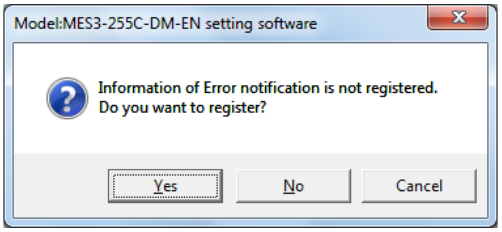


*2 After modification of entry details of each item, click the [Close] button instead of clicking the [Register] button or another tree menu is selected, the message shown on the right is displayed.

[Yes] button : To register

[No] button : Not to register.

[Cancel] button : Back to the setting dialog box



4.8.7. Regular report registration

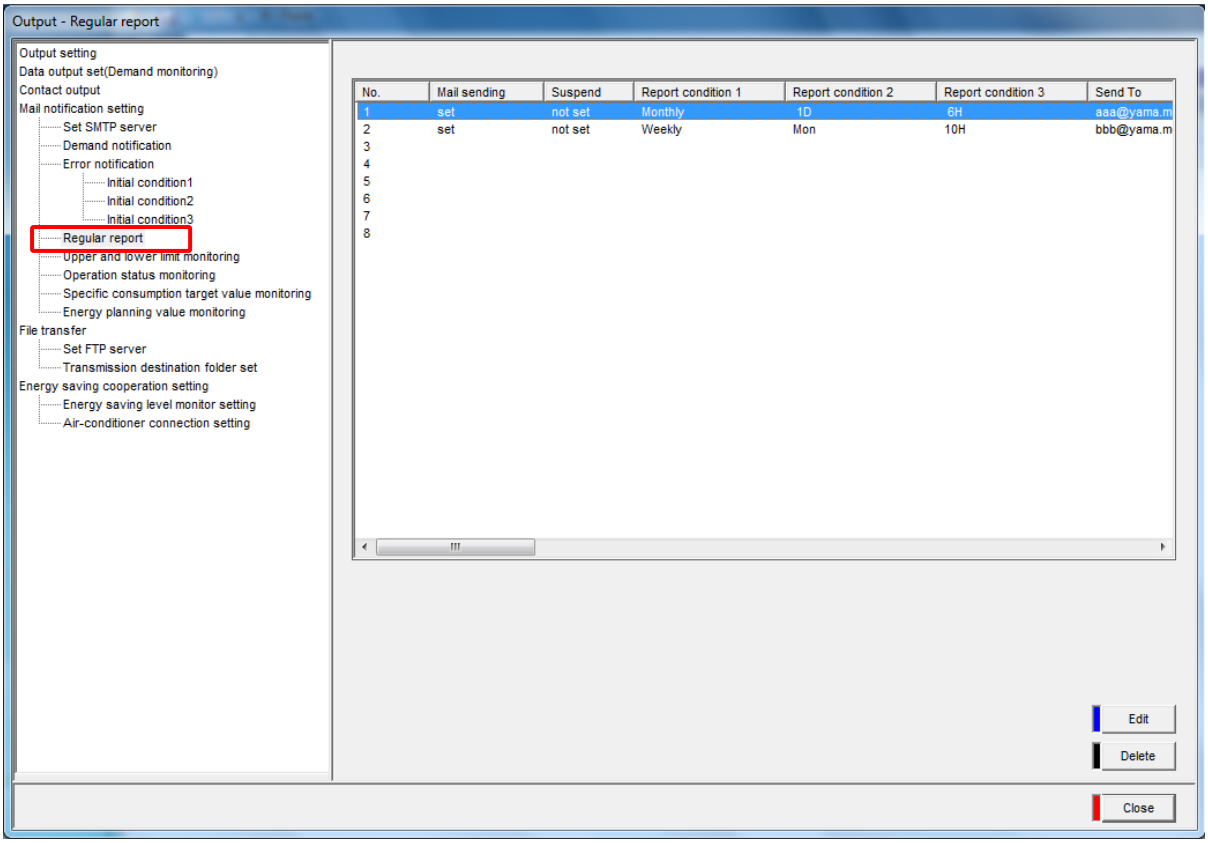
This section explains the operation procedure in the [Regular report].
After registration of the regular report setting, it becomes possible to issue the mail report from EcoWebServerIII periodically.
Up to 8 points can be registered for regular report.

Confirming the list of registered regular report setting

This section explains the procedure to display the list of registered regular report setting and confirm it.

1 Displaying the [Regular report] dialog box

Click the [Regular report] in the tree menu on the [Output] screen.



2 Checking the registration information

Check the following information displayed on the list.

[No.]	: Regular report No.
[Mail sending]	: Active or inactive status of regular report (by mail)
[Suspend]	: Active or inactive status of temporarily hold of mail transmission
[Report condition1] to [Report condtion 3]	: Regular report timing (monthly, weekly, daily, etc.)
[Send To]	: Destination address of regular report mail
[Subject]	: Mail subject of regular report mail
[Body]	: Text of regular report mail

Registering the new regular report settings

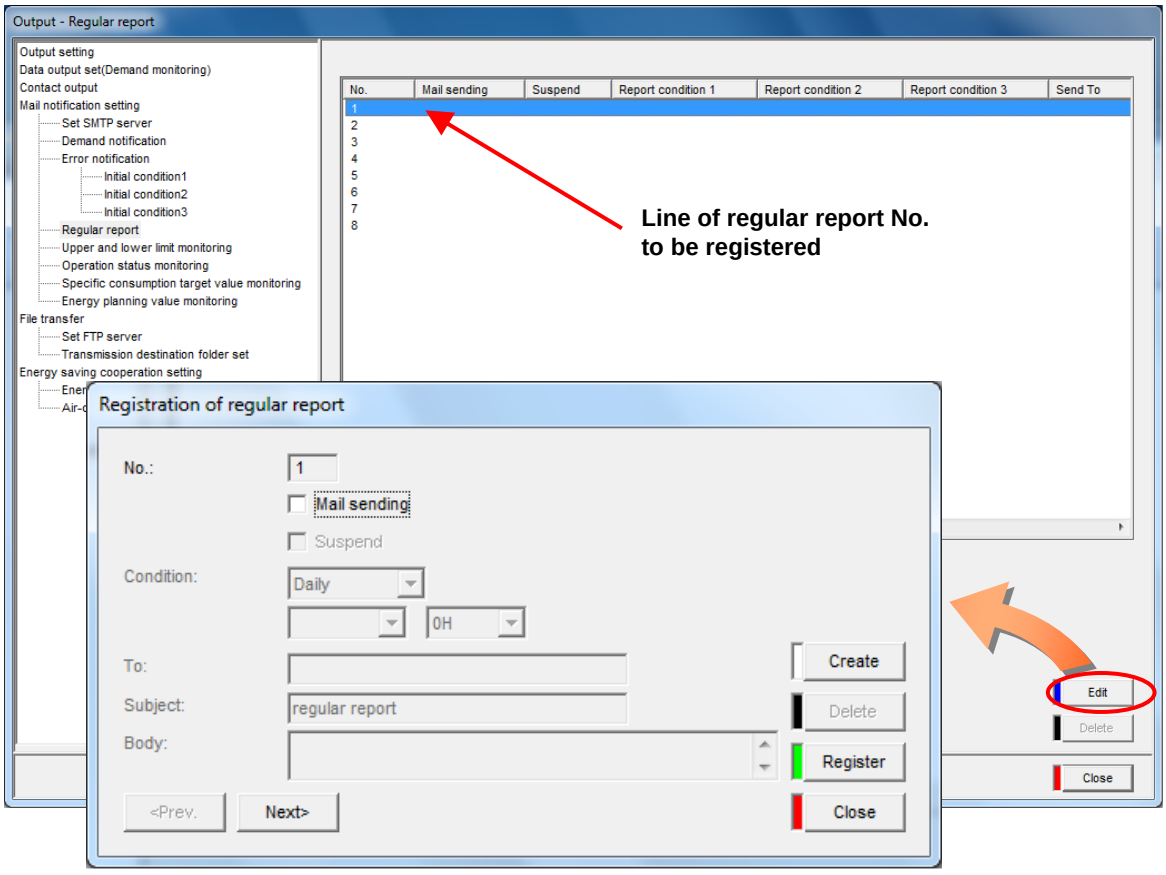
This section explains the procedure to register the new regular report (by mail) settings.

1 Displaying the [Regular report] screen

Click the [Regular report registration] in the tree menu on the external device coordination setting screen.

2 Displaying the [Registration of regular report] dialog box

Double-click the line of regular report No. to be registered in the dialog box of [Regular report], or select the line of regular report No. to be registered and click the [Edit] button.



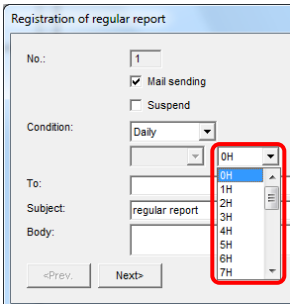
3 Setting the active/inactive status of report

(1) To set the regular report mail to be active, check the [Mail sending] check box.

(2) To hold the mail temporarily, check the [Suspend] check box.

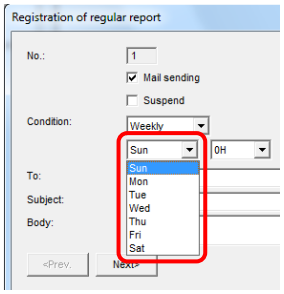
4 Configuring report condition

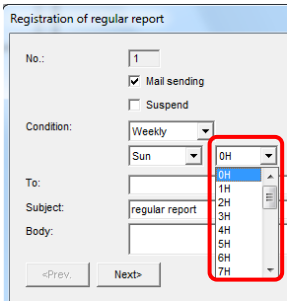
Set the timing (date and time) to perform regular report.



- **For daily**: Select the time.

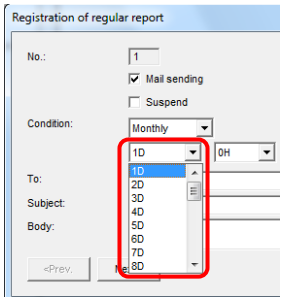
  [Time]
  Selection range [0H] to [23H]
  Default value [0H]

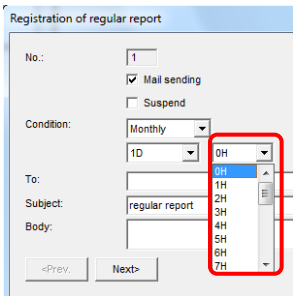




- **For weekly**: Select a day of the week and the time.

  [Day of the week]
  Selection range [Sun] to [Sat]
  Default value [Sun]
  [Time]
  Selection range [0H] to [23H]
  Default value [0H]





- **For monthly: Select a date and the time.**

  [Date]
  Selection range [1D] to [28D]
  Default value [1D]
  [Time]
  Selection range [0H] to [23H]
  Default value [0H]

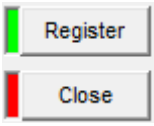
5 Setting the destination address, subject and text of the mail report

Set these items only if checked the [Mail sending] check box. Input conditions are as follows.

[To]	Characters	Up to 50 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? “ < > |
[Subject]	Default	regular report
	Characters	Up to 30 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? “ < > |
[Body]	Characters	Up to 128 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? “ < > |

6 Registering

Click the button in the [Registration of regular report] dialog box to register.

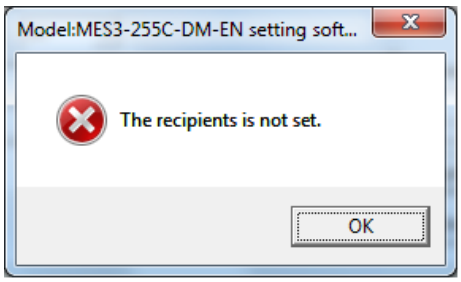


[Register] button : Register the set details of regular report.

[Close] button : Back to the dialog box of [Regular report registration].

*1 If the set details are not proper, an error message as shown on the right is displayed when clicking the [Register] button according to the error details.
Reset the details so as to meet the conditions of each item.

(Example of display)

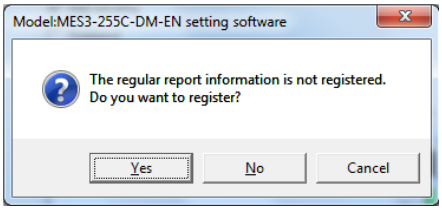


*2 After modification of entry details of each item, click the [Create],[< Prev.], [Next>] or [Close] button instead of clicking the [Register] button, the message shown on the right is displayed.

[Yes] button : To register

[No] button : Not to register.

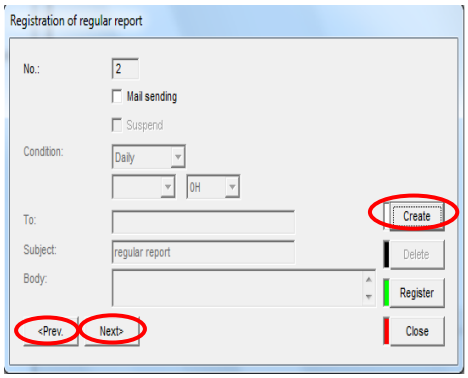
[Cancel] button : Back to the [Regular report registration] dialog box



<For continuous registration of regular report settings>

For continuous registration of regular report settings, click the [Create] button and repeat the steps from 3 to 6.

To confirm, delete or change the previous registration of regular report settings, click the [<Back] button.
To confirm, delete or change the next registration of regular report settings, click the [Next>] button.



Deleting the registered regular report settings

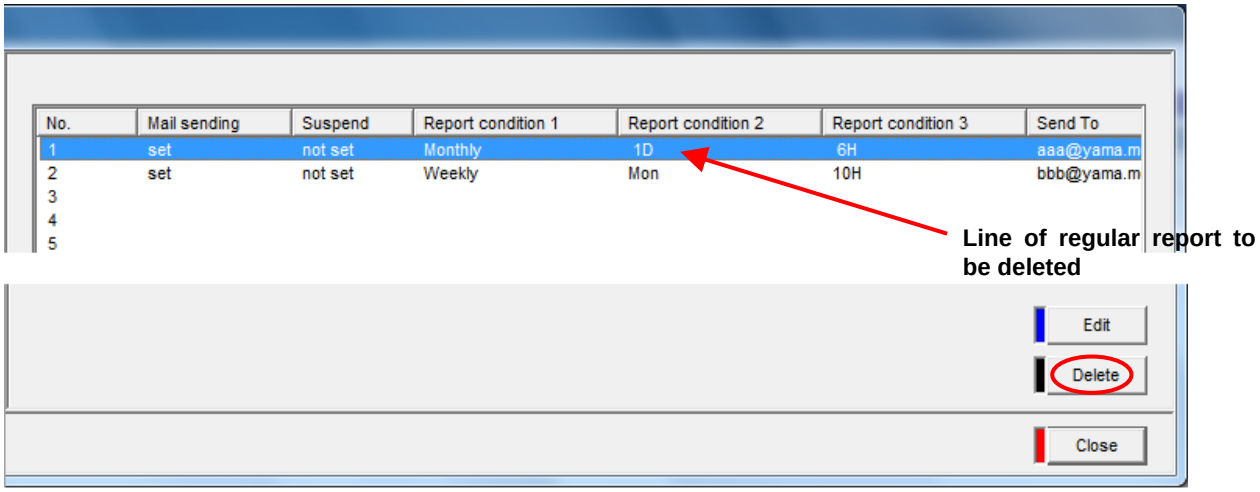
This section explains the procedure to delete the registered regular report settings.

1 Displaying the [Regular report] screen

Click the [Regular report] in the tree menu on the [Output] screen.

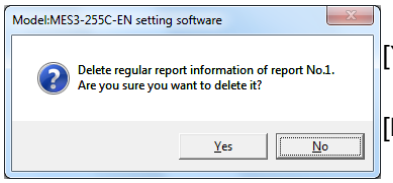
2 Selecting the registered regular report settings to be deleted and clicking the [Delete]

Select the line of regular report to be deleted from the list in the [Regular report] dialog box, click the [Delete] button.



3 Deleting

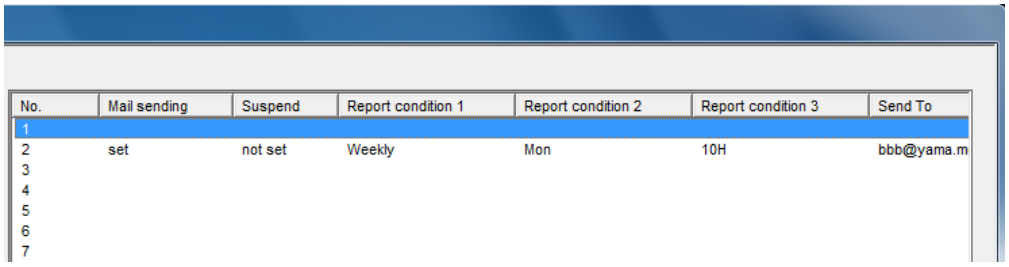
The message confirming deletion is displayed. Click the [Yes] button to execute deletion.


Model:MES3-255C-EN setting software
Delete regular report information of report No.1.
Are you sure you want to delete it?
Yes
No

[Yes] button : Delete the regular report settings and back to the dialog box of [Regular report].

[No] button : Cancel deletion and back to the dialog box of [Regular report]

After deletion, the information of the deleted regular report settings is removed from the list in the dialog box of [Regular report].



Remarks

- It can be also deleted by clicking the [Delete] button in the dialog box of [Regular report].

Editing the registered regular report settings

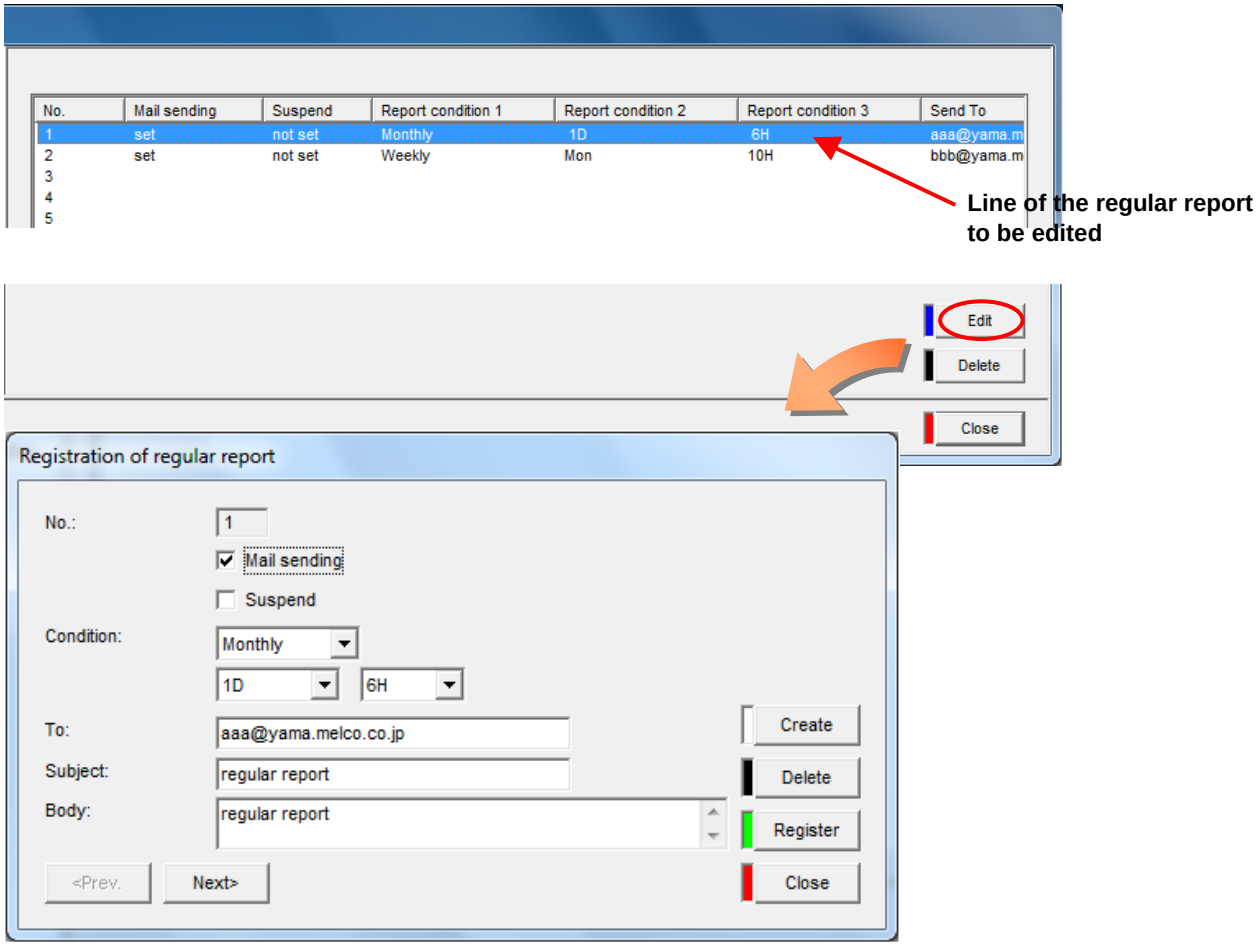
This section explains the procedure to edit the registered regular report settings.

1 Displaying the [Regular report] screen

Click the [Regular report] in the tree menu on the [Output] screen.

2 Selecting the regular report settings to be edited and clicking the [Edit] button

Double-click the line of the regular report to be edited on the [Regular report] screen or select the line of the regular report to be edited, and click the [Edit] button.



3 Editing the items to be changed and registering them

Edit the item to be changed and then click the [Register] button.

* The input information and input conditions for each item are identical to those for new registration of the regular reports.

4.8.8. Upper and lower limit monitoring notification registration

This section explains the operation procedure for setting [Upper and lower limit monitoring].
After registration of the upper/lower limit monitoring notification, it becomes possible to detect an event that the measuring point value exceeds the upper or lower limit and to notification it by mail.
Up to 32 points can be registered for upper/lower limit monitoring notification.
However, the target notifications are the measuring points for instantaneous value only.

Remarks

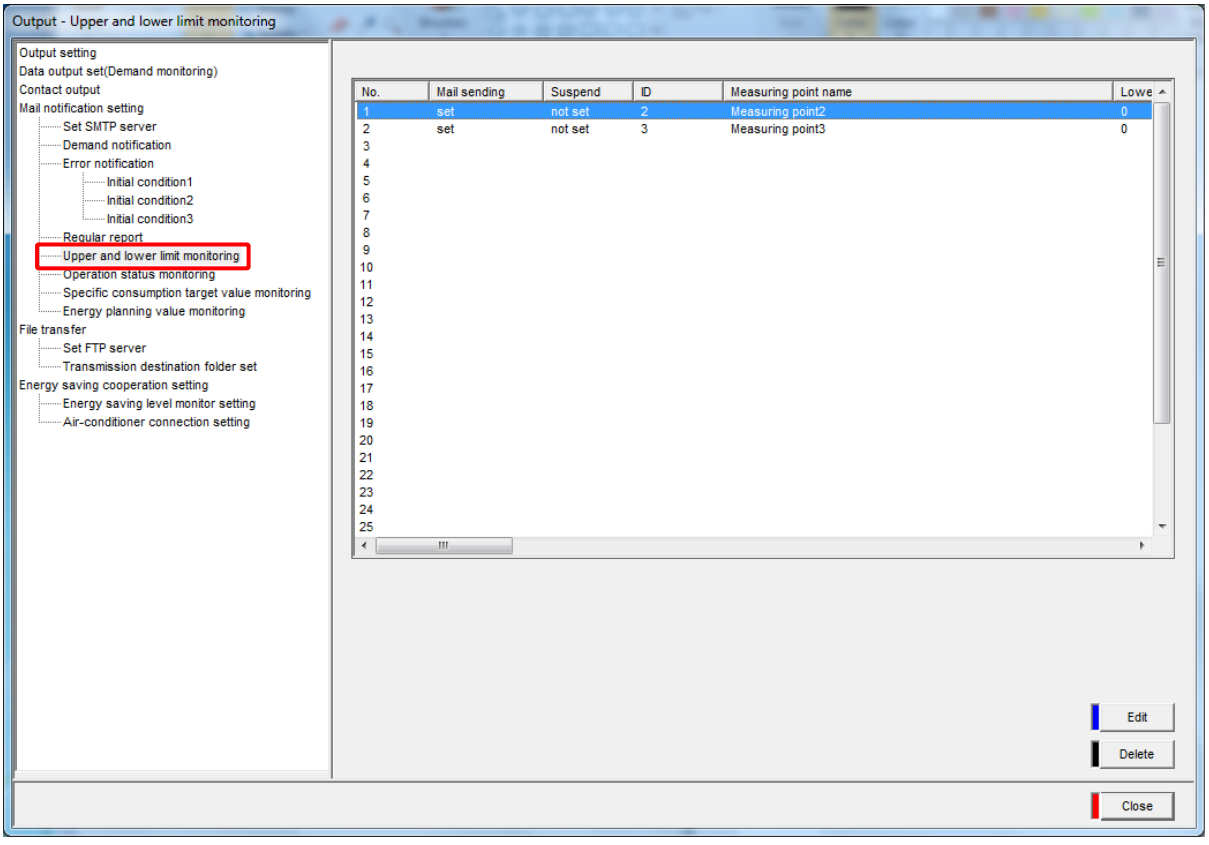
- If no measuring point of instantaneous value data type is registered or the measuring point's monitoring type is "upper limit monitoring", "lower limit monitoring" or "upper/lower limit notification", the setting of upper and lower limit monitoring notification cannot be registered.
- The setting of upper and lower limit monitoring notification can be registered only to a single measuring point and multiple registration to a same single measuring point is not allowed.
  If intending to register multiple setting of upper and lower limit monitoring notification to a single measuring point, register the same measuring point to multiple separate measuring points and register the conditions of upper and lower limit monitoring notification.

Confirming the list of registered upper and lower limit monitoring notifications

This section explains the procedure for displaying and checking the list of registered upper and lower limit monitoring notifications.

1 Displaying the [Upper and lower limit monitoring] screen

Click on [Upper and lower limit monitoring] in the tree menu on the [Output] screen.



2 Checking the registration information

Check the following information displayed on the list.

[No.]	: Upper and lower limit monitoring notification No.
[Mail sending]	: Active or inactive status of upper and lower limit monitoring notification (by mail)
[Suspend]	: Active or inactive status of temporarily holding of mail transmission
[ID]	: Measuring point ID of upper and lower limit monitoring notification
[Measuring point name]	: Name of measuring point of upper and lower limit monitoring notification
[Lower limit monitoring]	: Target value for lower limit monitoring (* If this value is not set, "-" (hyphen) is displayed.)
[Upper limit monitoring]	: Target value for upper limit monitoring (* If this value is not set, "-" (hyphen) is displayed.)
[Send To]	: Destination address of upper and lower limit monitoring notification mail transmission
[Subject]	: Subject of upper and lower limit monitoring notification mail
[Body]	: Text of upper and lower limit monitoring notification mail

Registering a new upper and lower limit monitoring notification

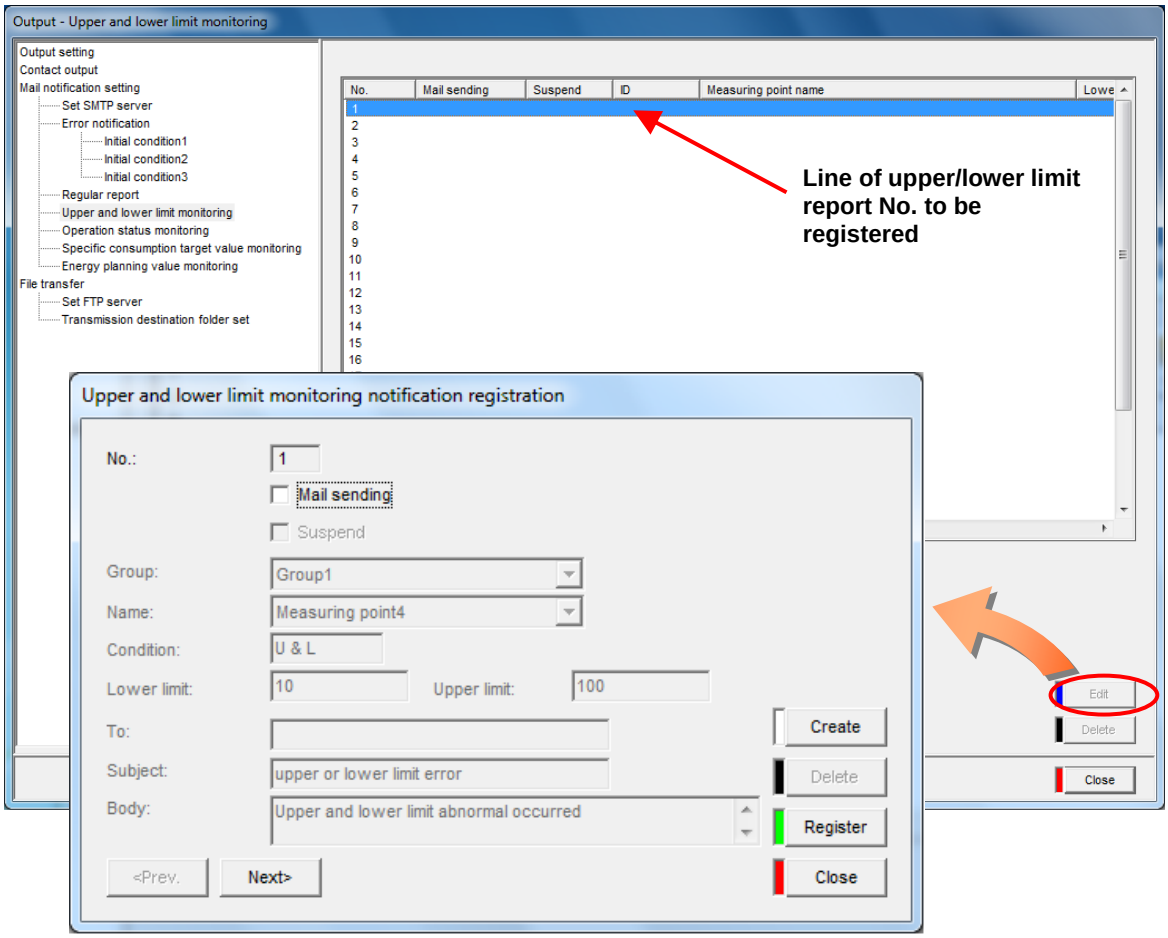
This sections explains the procedure for registering a new upper and lower limit monitoring notification (mail transmission).

1 Displaying the [Upper and lower limit monitoring] screen

Click the [Upper and lower limit monitoring] in the tree menu on the [Output] screen.

2 Displaying the dialog box of [Upper and lower limit monitoring notification registration]

Double-click the line of upper and lower limit monitoring notification No. to be registered on the [Upper and lower limit monitoring] screen or select the line of the upper and lower limit monitoring notification No. to be registered, and click the [Edit] button.



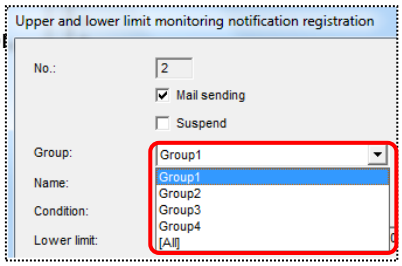
3 Setting the active/inactive status of notification

(1) To send the upper and lower limit monitoring notification mail, check the [Mail sending].

(2) To hold the mail temporarily when sending a mail, check the [Suspend] check box.

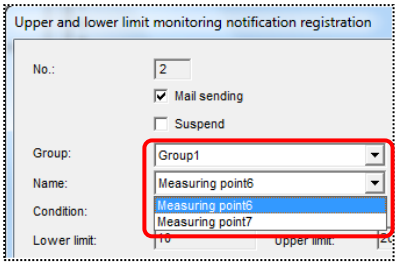
4 Specifying the measuring point to notification

Select the measuring points for upper and lower limit monitoring notificatio



(1) Select [Group].

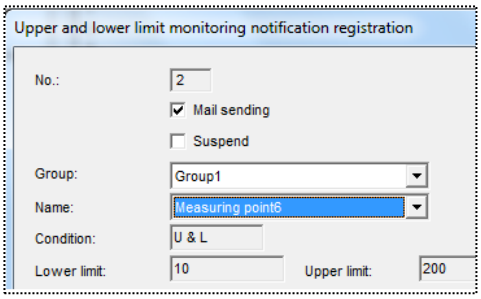
(2) Select the measuring points for upper and lower limit monitoring notification from the measuring points including in the group selected in (1).



* **Only instantaneous value measuring points set to "upper limit monitoring", "lower limit monitoring" or "upper/lower limit monitoring" are displayed in the pull-down menu.**

Remarks

- The information set for the selected measuring point is displayed in the monitoring conditions (upper limit monitoring, lower limit monitoring, upper/lower limit monitoring) and setting values (lower limit setting value, upper limit setting value).



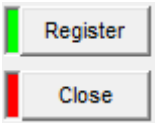
5 Setting the destination address, subject and text of the mail notification

Set this information only when [Mail sending] is checked. The entry conditions are listed below.

[To]	Characters	Up to 50 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |
[Subject]	Default	Upper or lower limit error
	Characters	Up to 30 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |
[Body]	Default	Upper or lower limit error occurred.
	Characters	Up to 128 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |

6 Registering

Click the button in the dialog box of [Upper and lower limit monitoring notification registration] to register.

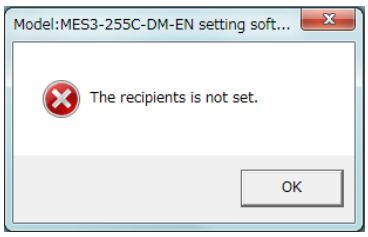


[Register] button : Register the set details of upper and lower limit monitoring notification

[Close] button : Back to the [Upper and lower limit monitoring] screen.

*1 If the set details are not proper, an error message as shown on the right is displayed when clicking the [Register] button according to the error details.
Reset the details so as to meet the conditions of each item.

(Example of display)

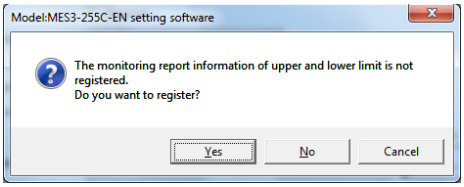


*2 After modification of entry details of each item, click the [Create], [< Back], [Next>] or [Close] button instead of clicking the [Register] button, the message shown on the right is displayed.

[Yes] button : To register

[No] button : Not to register

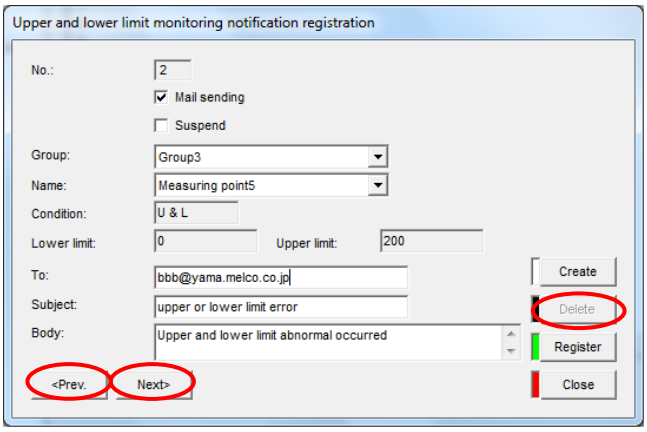
[Cancel] button : Back to the dialog box of [Registration of upper/lower limit monitoring settings]



<For continuous registration of upper and lower limit monitoring notification>

For continuous registration of upper and lower limit monitoring notification, click the [Create] button and repeat the steps from 3 to 6.

To confirm, delete or change the previous registration of upper and lower limit monitoring notification, click the [<Prev.] button.
To confirm, delete or change the next registration of upper and lower limit monitoring notification, click the [Next>] button.



Deleting the registered upper and lower limit monitoring notification

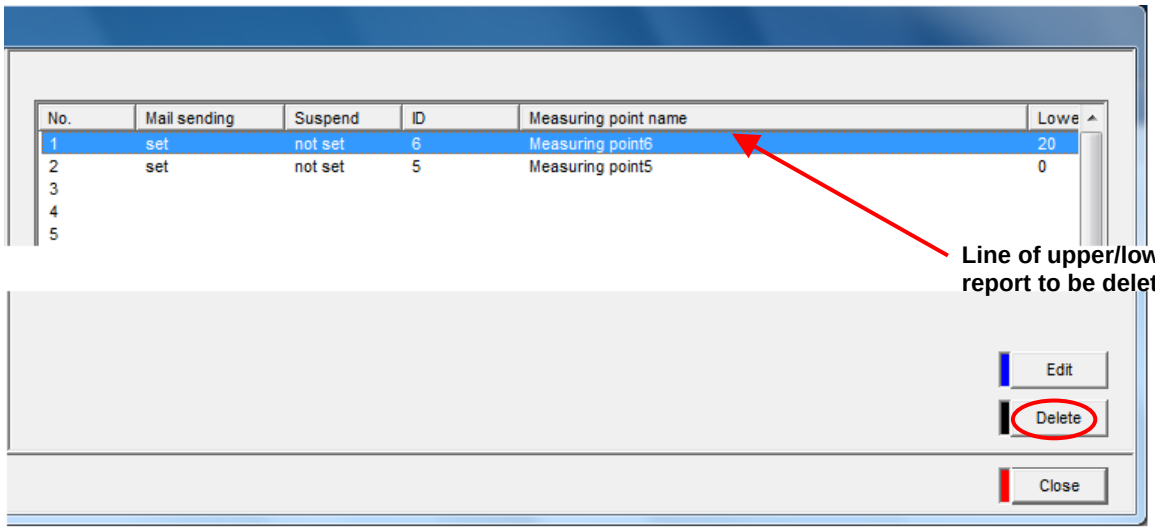
This section explains the procedure for deleting the registered upper and lower limit monitoring notification.

1 Displaying the [Upper and lower limit monitoring] screen

Click the [Upper and lower limit monitoring notification registration] in the tree menu on the [Output] screen.

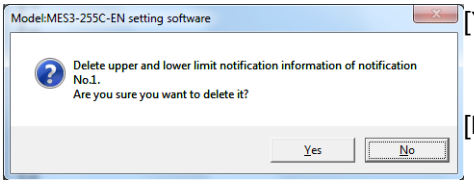
2 Selecting the upper/lower limit report to be deleted, and clicking the [Delete] button

Select the line of the upper and lower limit monitoring notification to be deleted from the [Upper and lower limit monitoring] screen, and click the [Delete] button.



3 Deleting

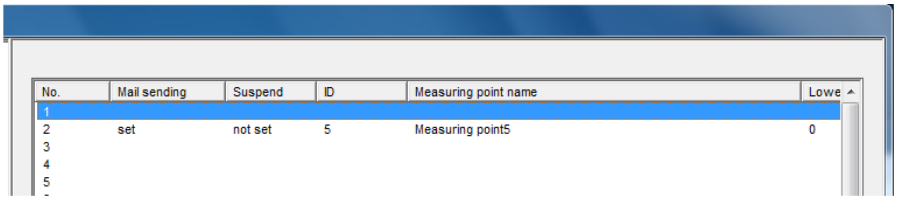
The message confirming deletion is displayed. Click the button to execute deletion.


Model:MES3-255C-EN setting software
Delete upper and lower limit notification information of notification No.1.
Are you sure you want to delete it?
Yes
No

[Yes] button : Delete the upper and lower limit monitoring notification settings and back to the dialog box of [Upper and lower limit monitoring]

[No] button : Cancel the deletion, and back to the dialog box of [Upper and lower limit monitoring] screen

After deletion, the information of the deleted upper and lower limit monitoring notification is removed from the list in the dialog box of [Upper and lower limit monitoring].



Remarks

- It can be also deleted by clicking the [Delete] button in the dialog box of [Upper and lower limit monitoring notification registration].

Editing the registered upper and lower limit monitoring notification

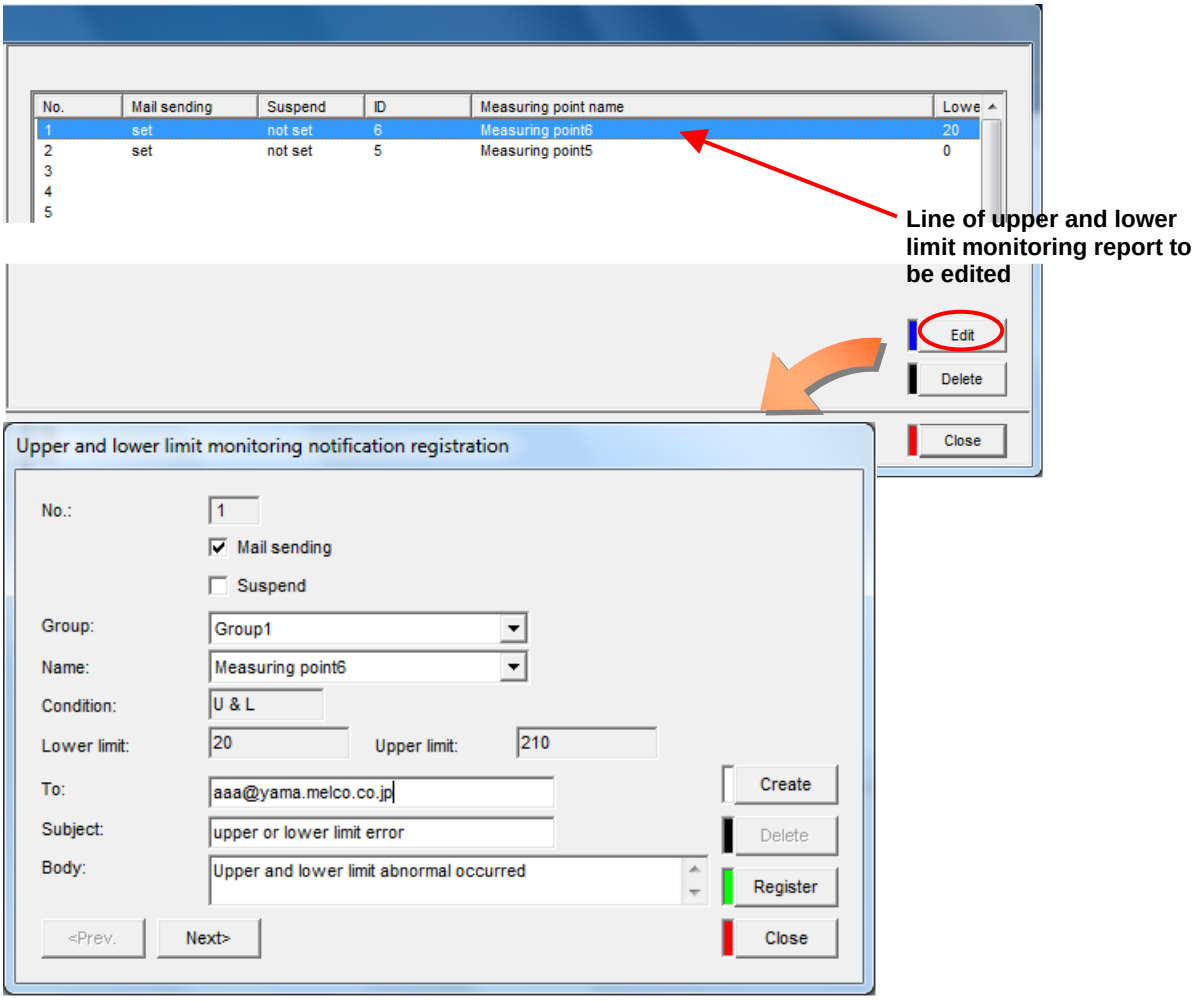
This section explains the procedure for editing the information registered for an upper and lower limit monitoring notification.

1 Displaying the [Upper and lower limit monitoring] screen

Click the [Upper and lower limit monitoring] in the tree menu on the [Output] screen.

2 Selecting the upper/lower limit notification to edit, and clicking the [Edit] button

Double-click the line of the upper and lower limit monitoring notification to be edited on the [Upper and lower limit monitoring] screen, or select the line of the upper and lower limit monitoring notification to be edited, and click the [Edit] button.



3 Editing the items to be changed and registering them

Edit the item to be changed and then click the [Register] button.

* The input information and input conditions for each item are identical to those for new registration of the upper and lower limit monitoring notification.

4.8.9. Operating status monitoring notification registration

This section explains the operation procedure in the [Operation status monitoring].
After registration of the operating status monitoring notification, it becomes possible to notification the change of operating status by mail.
Up to 32 points can be registered for operating status monitoring notification.
However, the target points are the measuring points for operating status monitoring only.

Remarks

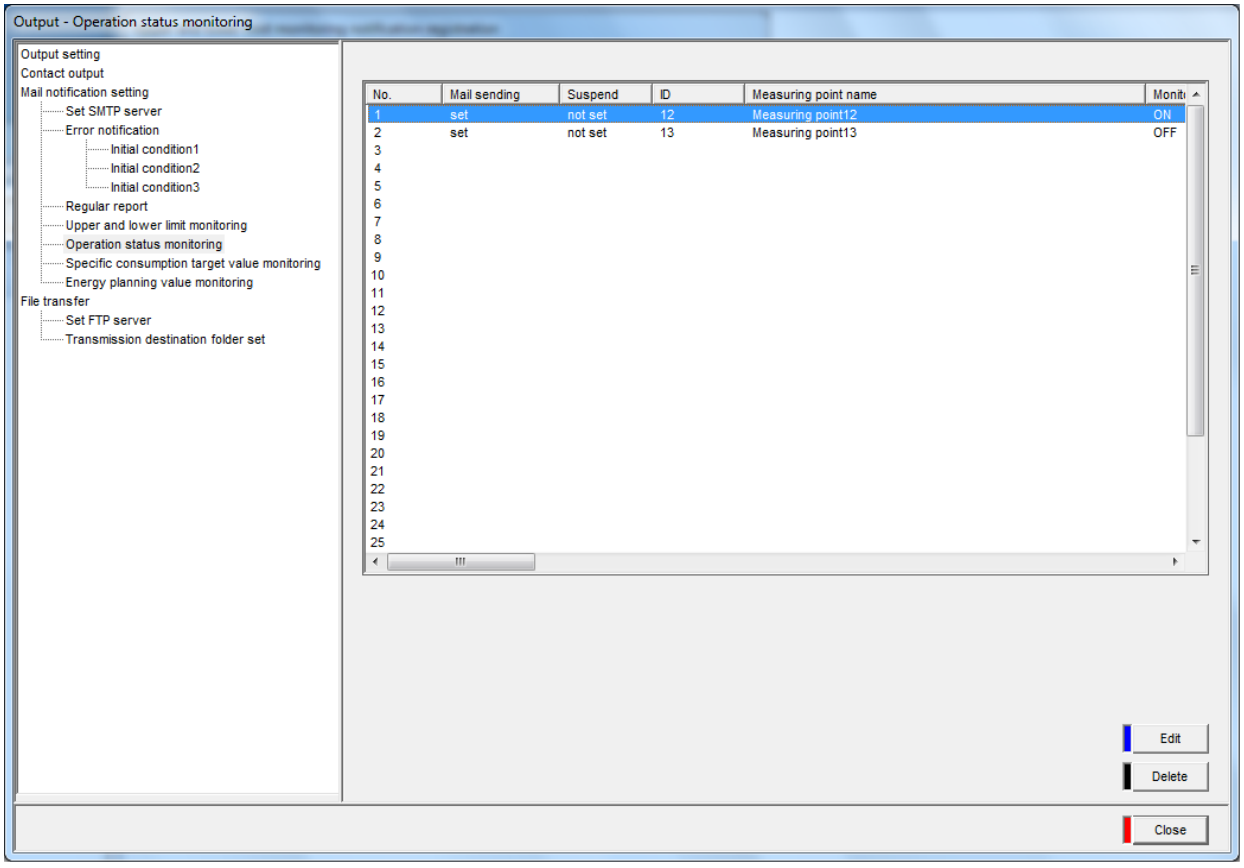
- If no measuring point of operating status monitoring data type is registered, the settings of operating status monitoring notification cannot be registered.
- The settings of operating status monitoring notification can be registered only to a single measuring point and multiple registration to a same single measuring point is not allowed.
  If intending to register multiple settings of operating status monitoring notification to a single measuring point, register the same measuring point to multiple separate measuring points and register the conditions of operating status monitoring notification.

Confirming the list of registered operating status monitoring notifications

This section explains the procedure for displaying and confirming the list of registered operating status monitoring notifications.

1 Displaying the [Operation status monitoring] screen

Click the [Operation status monitoring] in the tree menu on the [Output] screen.



2 Checking the registration information

Check the following information displayed on the list

[No.]	: Operating status monitoring notification No.
[Mail sending]	: Active or inactive status of operating status monitoring notification (by mail)
[Suspend]	: Active or inactive status of temporarily holding of mail transmission
[ID]	: Measuring point ID of operating status monitoring notification
[Measuring point name]	: Measuring point name of operating status monitoring notification
[Monitoring conditions]	: Operating status monitoring notification conditions (ON, OFF, or ON/OFF)
[Send To]	: Destination address of operating status monitoring notification mail
[Subject]	: Subject of operating status monitoring notification mail
[Body]	: Text of operating status monitoring notification mail

Registering a new operating status monitoring notification

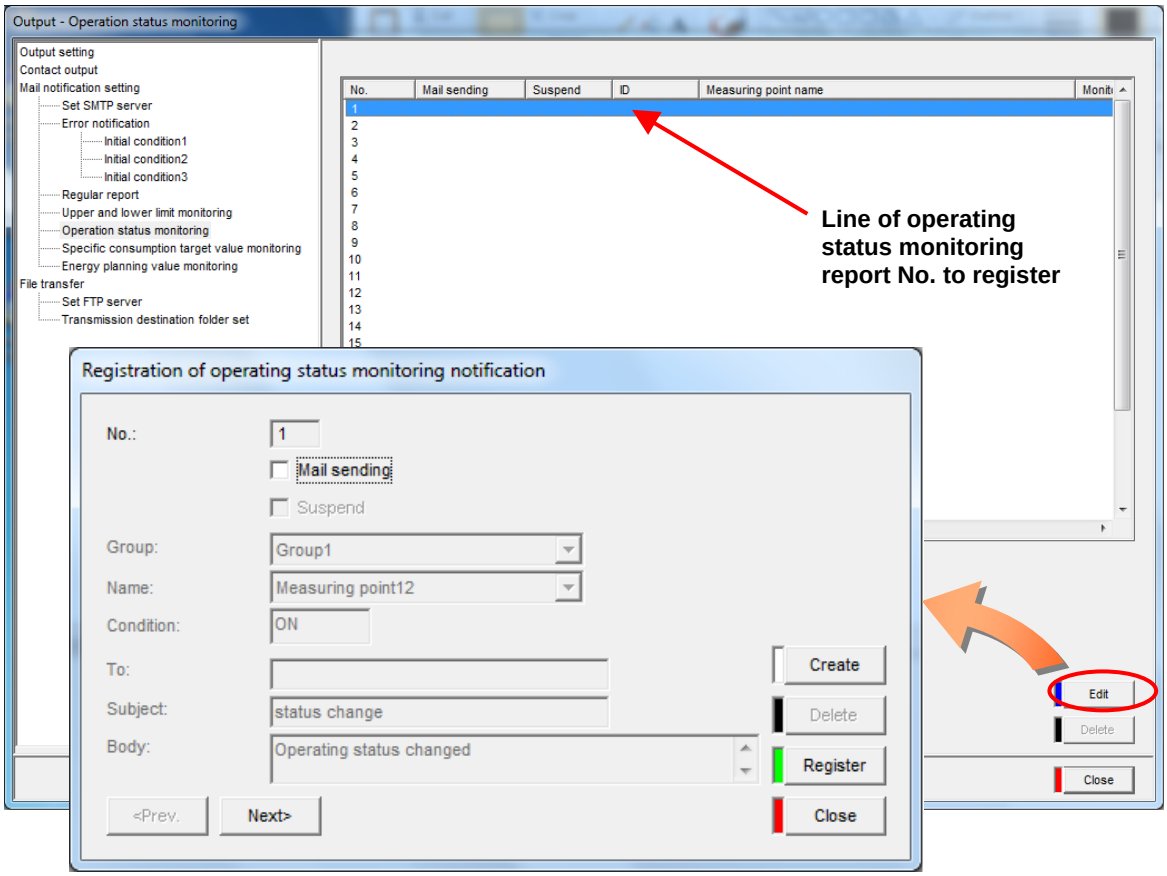
This section explains the procedure for registering a new operating status monitoring notification (by mail).

1 Displaying the [Operation status monitoring] screen

Click the [Operation status monitoring] in the tree menu on the external device coordination setting screen.

2 Displaying the dialog box of [Registration of operating status monitoring notification]

Double-click the line of the operating status monitoring notification No. to be registered on the [Operation status monitoring] screen or select the line of the operating status monitoring notification No. to be registered, and click the [Edit] button.



3 Setting the active/inactive status of notification

(1) To send the operating status monitoring notification mail, check the [Mail sending].

* **The operating status monitoring results are not recorded in the system log. If intending to record the monitoring data in the operating status monitoring data file, set it from the dialog box of [Measuring point].**

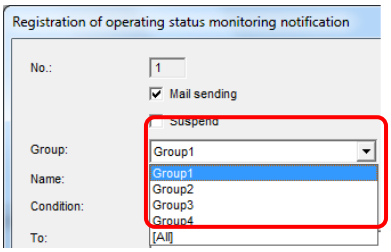
(☞ Refer to 4.4.4 Measuring point registration, Registering a new measuring point.)

(2) To hold the mail temporarily, check the [Suspend] check box.

4 Specifying the measuring point to notification

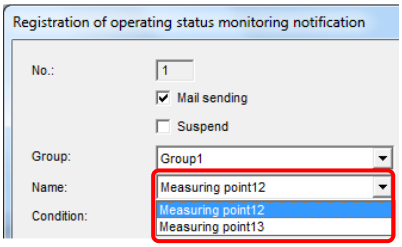
Select the measuring points for operating status monitoring notification.

(1) Select [Group].



(2) Select the measuring points for operating status notification from the measuring points including in the group selected in (1).

* Only the measuring points for operating status monitoring are displayed in the pull-down menu.



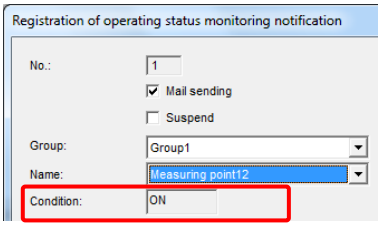
Remarks

- The conditions set for the selected measuring point are displayed in the monitoring conditions.

  ON : Notification is issued when the digital input signal changes from OFF to ON.

  OFF : Notification is issued when the digital input signal changes from ON to OFF.

  ON/OFF : Notification is issued when the digital input signal changes from OFF to ON and ON to OFF.



5 Setting the destination address, subject and text of the mail notification

Set this information only when [Mail sending] is checked. The entry conditions are listed below.

[To]	Characters	Up to 50 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |
[Subject]	Default	Status change
	Characters	Up to 30 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |
[Body]	Default	Operating status change occurred.
	Characters	Up to128 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? " < > |

6 Registering

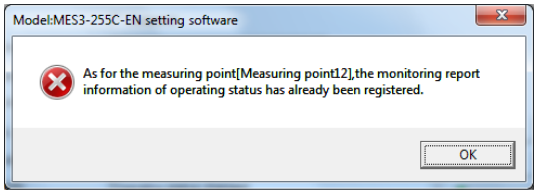
Click the button in the dialog box of [Registration of operating status monitoring notification] to register.

[Register] button : Register the set details of operating status monitoring notification

[Close] button : Back to the [Operation status monitoring] screen.

*1 If the set details are not proper, an error message as shown on the right is displayed when clicking the [Register] button according to the error details.
Reset the details so as to meet the conditions of each item.

(Example of display)

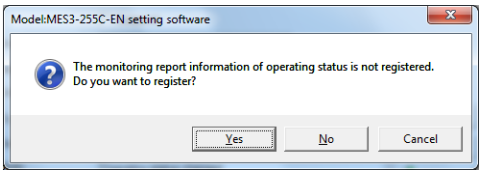

Model:MES3-255C-EN setting software
As for the measuring point[Measuring point12],the monitoring report information of operating status has already been registered.
OK

*2 After modification of entry details of each item, click the [Create] [< Back], [Next>] or [Close] button instead of clicking the [Register] button, the message shown on the right is displayed.

[Yes] button : To register

[No] button : Not to register

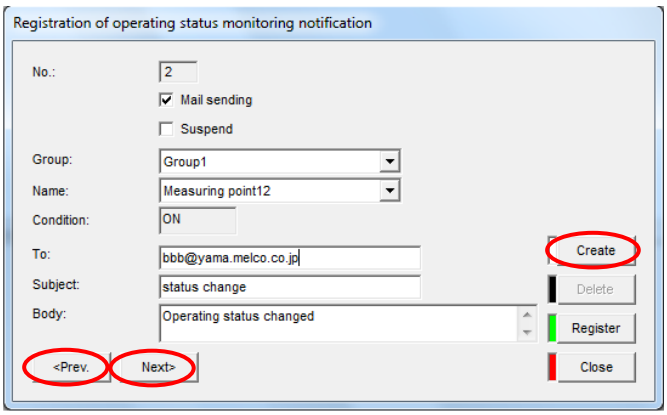
[Cancel] button : Back to the dialog box of [Registration of operating status monitoring notification]



<For continuous registration of operating status monitoring notification >

For continuous registration of operating status monitoring notification, click the [Create] button and repeat the steps from 3 to 6.

To confirm, delete or change the previous registration of operating status monitoring notification, click the [<Prev.] button.
To confirm, delete or change the next registration of operating status monitoring notification, click the [Next>] button.



Deleting the registered operating status monitoring notification

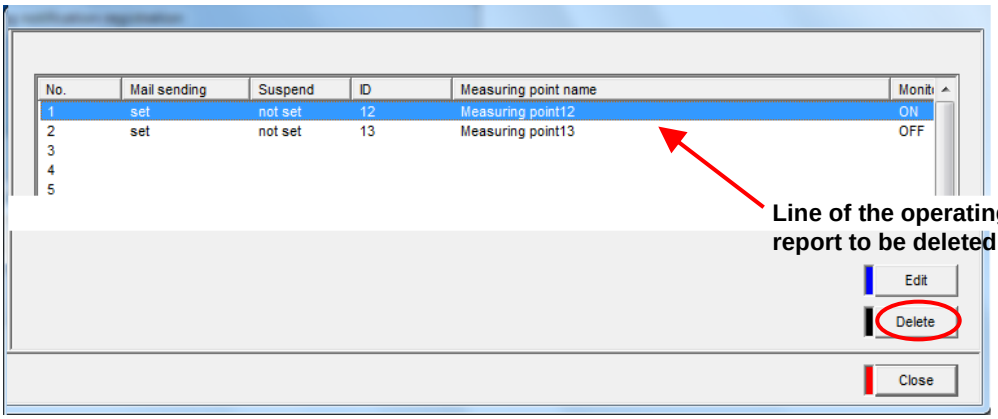
This section explains the procedure for deleting a registered operating status monitoring notification.

1 Displaying the [Operation status monitoring] screen

Click the [Operation status monitoring] in the tree menu on the [Output] screen.

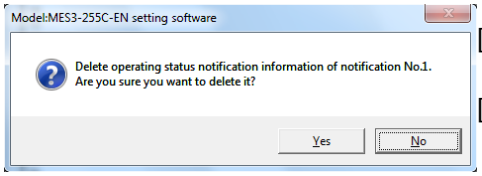
2 Selecting the operating status notification to be deleted, and clicking the [Delete] button

Select the line of the operating status monitoring notification to be deleted from the [Operation status monitoring] screen, and click the [Delete] button.



3 Deleting

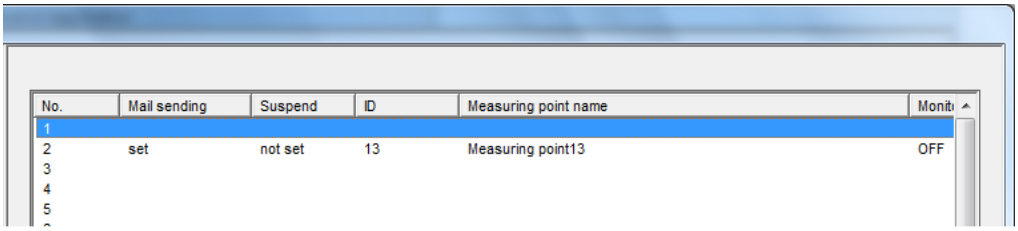
The message confirming deletion is displayed. Click the button to execute deletion.


Model:MES3-255C-EN setting software
Delete operating status notification information of notification No.1.
Are you sure you want to delete it?
Yes
No

[Yes] button : Delete the operating status monitoring notification and back to the [Operation status monitoring] screen.

[No] button : Cancel the deletion, and back to the [Operation status monitoring] screen

After deletion, the information of the deleted operating status monitoring notification is removed from the list in the dialog box of [Operation status monitoring].



Remarks

- It can be also deleted by clicking the [Delete] button in the dialog box of [Registration of operating status monitoring notification].

Editing the registered operating status monitoring notification

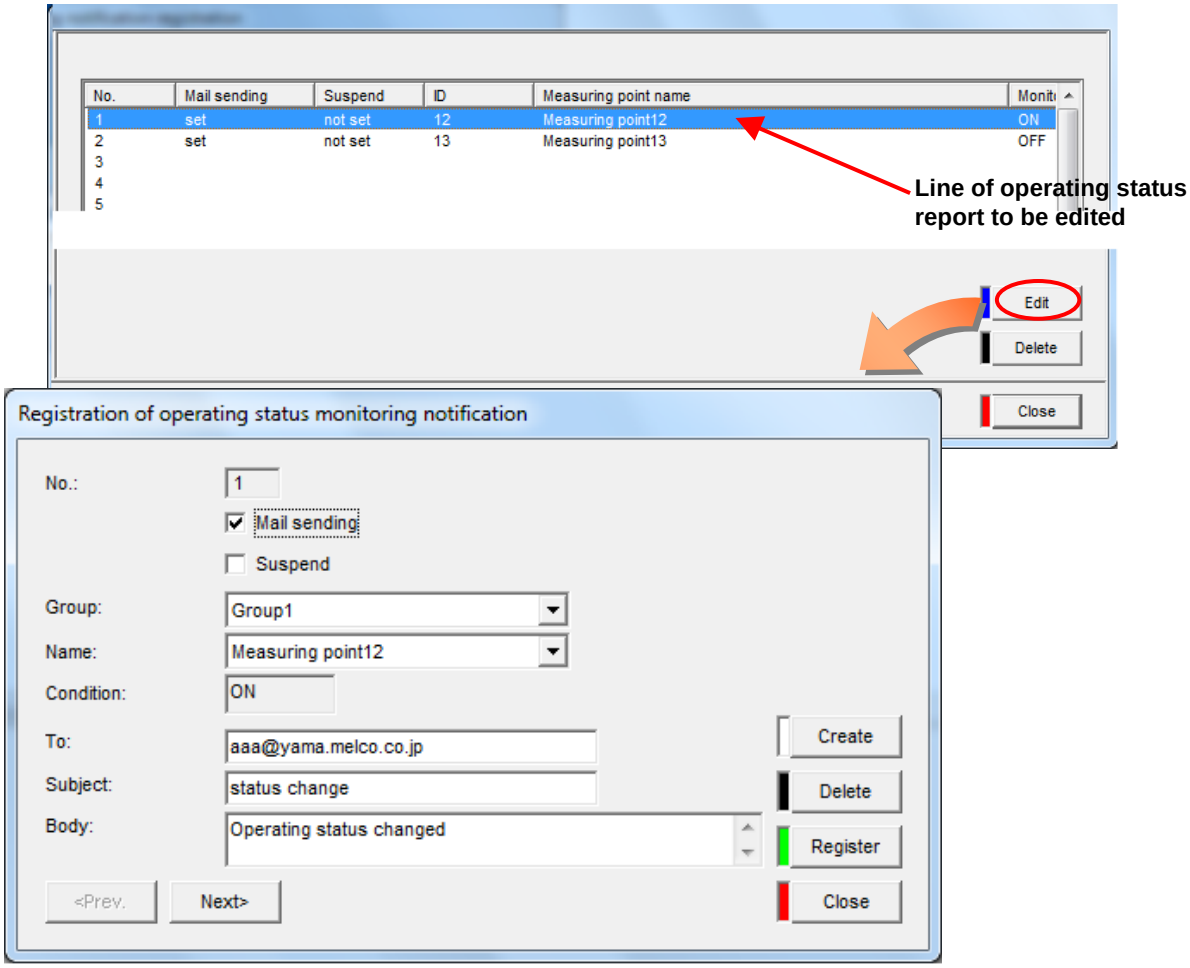
This section explains the procedure for editing the registered operating status monitoring notification.

1 Displaying the [Operation status monitoring] screen

Click the [Operation status monitoring] in the tree menu on the [Output] screen.

2 Selecting the operating status notification to be edited, and clicking the [Edit] button

Double-click the line of the operating status notification to be edited in the list on the [Operation status monitoring] screen, or select the line of the operating status monitoring notification to be edited and click the [Edit] button.



3 Editing the items to be changed and registering them

Edit the item to be changed and then click the [Register] button.

* The input information and input conditions for each item are identical to those for new registration of the operating status monitoring notification.

4.8.10. Specific consumption target value monitoring notification registration

This section explains the operation procedure in the [Specific consumption target value monitoring].
After registration of the specific consumption target value monitoring report, it becomes possible to detect an event that the specific consumption measuring point value exceeds the target value and to report it by mail.
Up to 64 points can be registered for specific consumption target value monitoring notification.

Remarks

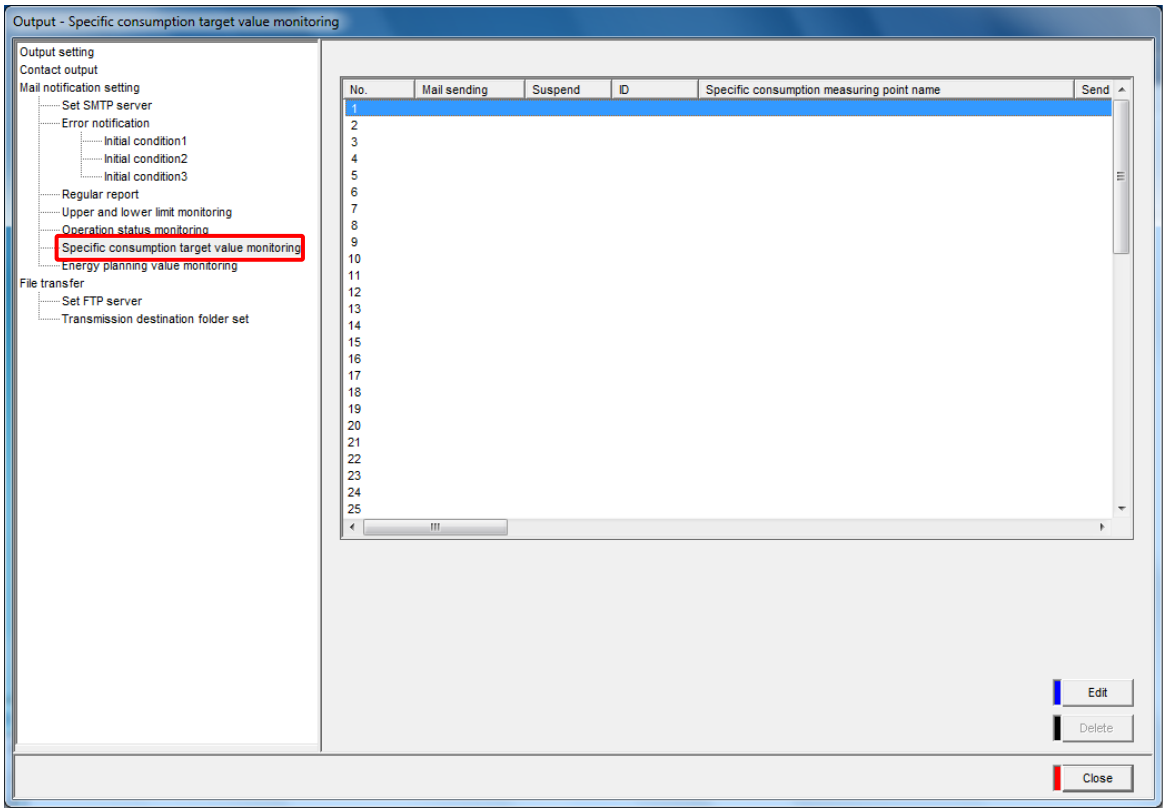
- The monitoring cycle is one hour.
- If no specific consumption measuring point is registered or if the specific consumption measuring point's is not set for specific consumption target value monitoring, the setting of specific consumption target value monitoring notification cannot be registered.
- The settings of specific consumption target value monitoring notification can be registered only to a single measuring point and multiple registration to a same single measuring point is not allowed.
- **Set the target value from the Web screen of the EcoWebServerIII.**
  (☞ Refer to **"Setting of Planned/Target values" in Instruction Manual – Operation**.)

Confirming the list of registered specific consumption target value notifications

This section explains the procedure for displaying and checking the list of registered specific consumption target value monitoring notifications.

1 Displaying the [Specific consumption target value monitoring] screen

Click the [Specific consumption target value monitoring] in the tree menu on the [Output] screen.



2 Checking the registration information

Check the following information displayed in the [Terminal list].

[No.]	: Specific consumption target value monitoring notification No.
[Mail sending]	: Active or inactive status of specific consumption target value monitoring notification (by mail)
[Suspend]	: Active or inactive status of temporarily holding of mail transmission
[ID]	: Specific consumption measuring point ID of specific consumption target value monitoring notification
[Specific consumption measuring point name]	: Name of specific consumption measuring point of specific consumption target value monitoring notification
[Send To]	: Destination address of specific consumption target value monitoring notification mail
[Subject]	: Subject of specific consumption target value monitoring notification mail
[Body]	: Text of specific consumption target value monitoring notification mail

Registering a new specific consumption target value monitoring notification

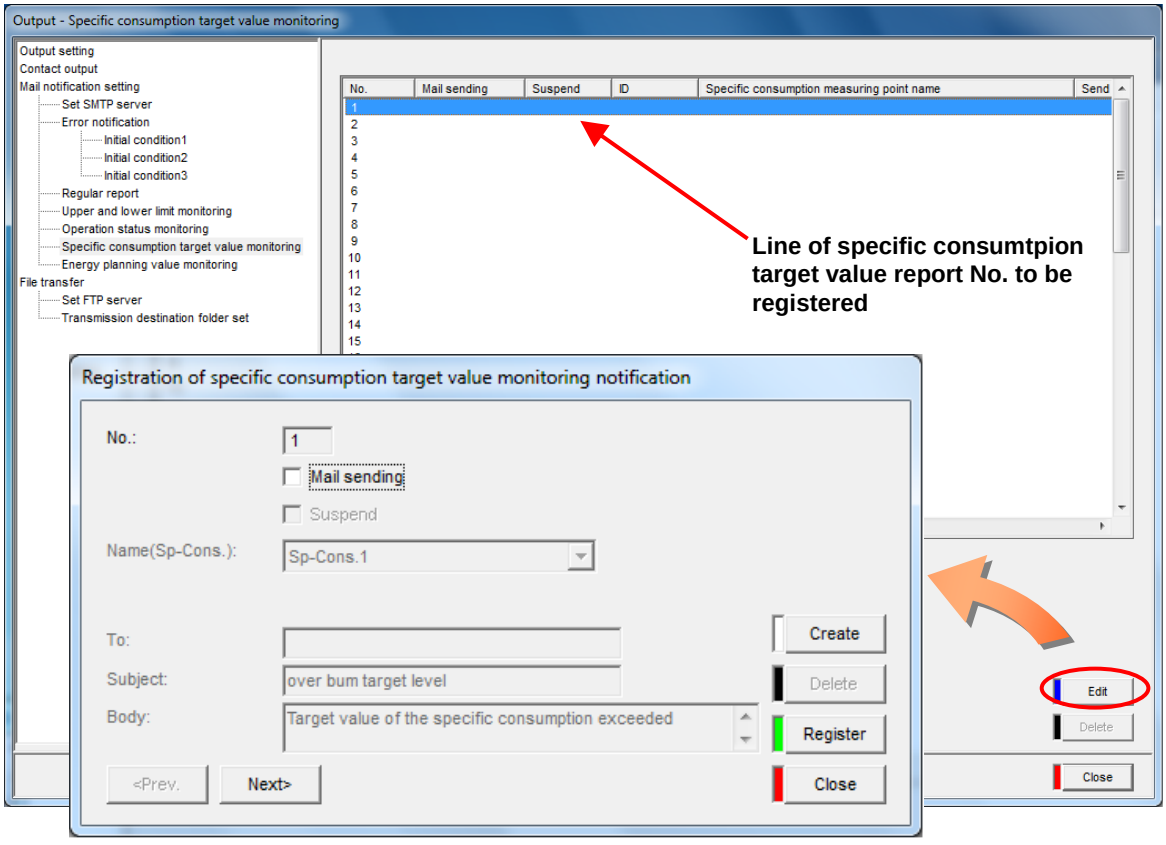
This section explains the procedure for registering a new specific consumption target value monitoring notification (by mail).

1 Displaying the [Specific consumption target value monitoring] screen

Click the [Specific consumption target value monitoring] in the tree menu on [Output] screen.

2 Displaying the dialog box of [Registration of specific consumption target value monitoring notification]

Double-click the line of the specific consumption target value monitoring notification No. to be registered on the [Specific consumption target value monitoring] screen or select the line of the specific consumption target value monitoring notification No. to be registered, and click the [Edit] button.



3 Setting the active/inactive status of notification

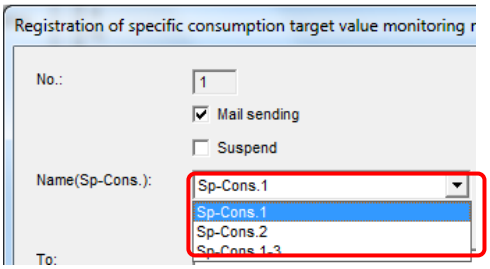
(1) To send the specific consumption target value monitoring notification mail, check the [Mail sending].

(2) To hold the mail temporarily when sending a mail, check the [Suspend] check box.

4 Specifying the specific consumption measuring point to notification

Select the specific consumption measuring point to monitor the specific consumption target value.

* Only the specific consumption measuring points for specific consumption target value monitoring are displayed in the pull-down menu.



5 Setting the destination address, subject and text of the mail notification

Set this information only when [Mail sending] is checked. The entry conditions are listed below.

[To]	Characters	Up to 50 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? “ < > |
[Subject]	Default	Over bum target level
	Characters	Up to 30 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? “ < > |
[Body]	Default	Specific consumption target value is exceeded.
	Characters	Up to 128 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? “ < > |

6 Registering

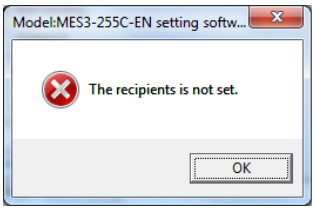
Click the button in the dialog box of [Registration of specific consumption target value monitoring notification] to register.

[Register] button : Register the set details of specific consumption target value monitoring notification.

[Close] button : Back to the [Specific consumption target value monitoring] screen.

*1 If the set details are not proper, an error message as shown on the right is displayed when clicking the [Register] button according to the error details. Reset the details so as to meet the conditions of each item.

(Example of display)

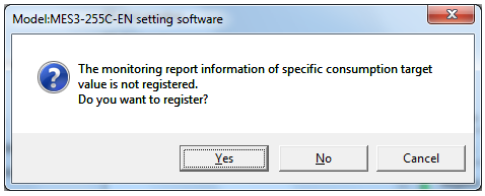


*2 After modification of entry details of each item, click the [Create],[< Prev.], [Next>] or [Close] button instead of clicking the [Register] button, the message shown on the right is displayed.

[Yes] button : To register

[No] button : Not to register

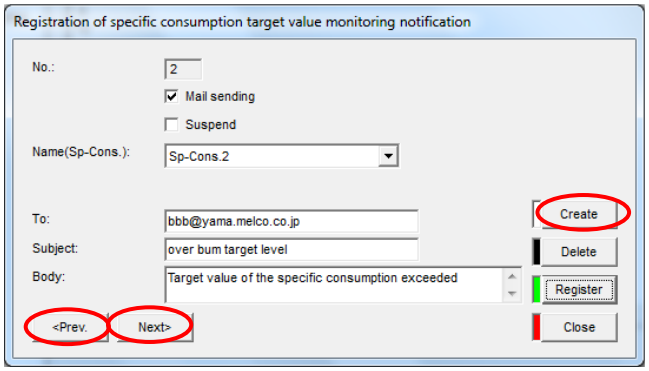
[Cancel] button : Back to the dialog box of [Specific consumption target value monitoring]



<For continuous registration of specific consumption target value monitoring notification >

For continuous registration of specific consumption target value monitoring notification, click the [Create] button and repeat the steps from 3 to 6.

To confirm, delete or change the previous registration of specific consumption target value monitoring notification, click the [<Prev.] button. To confirm, delete or change the next registration of specific consumption target value notification, click the [Next>] button.



Deleting the registered specific consumption target value monitoring notification

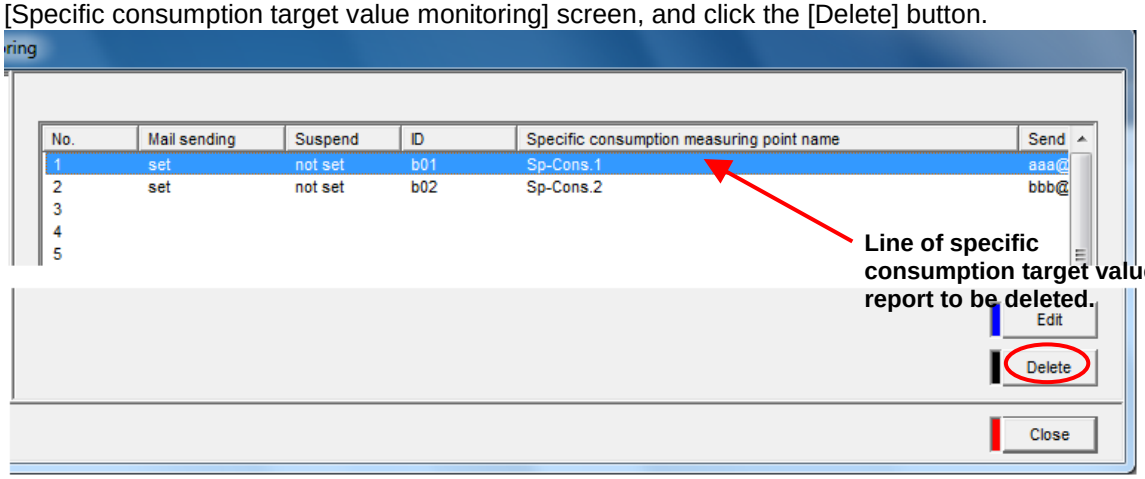
This section explains the procedure to delete the registered specific consumption target value monitoring notification.

1 Displaying the [Specific consumption target value monitoring] screen

Click the [Specific consumption target value monitoring] in the tree menu on the [Output] screen.

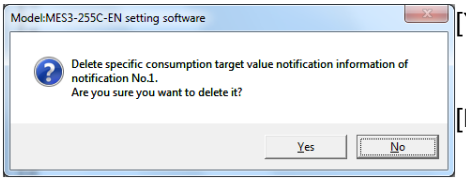
2 Selecting the specific consumption target value notification to be deleted, and clicking the [Delete] button

Select the line of the specific consumption target value monitoring notification to be deleted from the list on the [Specific consumption target value monitoring] screen, and click the [Delete] button.



3 Deleting

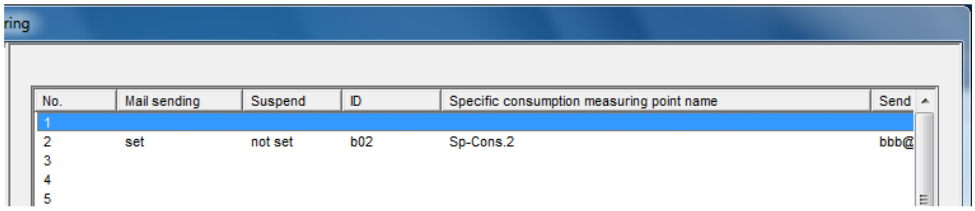
The message confirming deletion is displayed. Click the button to execute deletion.


Model:MES3-255C-EN setting software
Delete specific consumption target value notification information of notification No.1.
Are you sure you want to delete it?
Yes
No

[Yes] button : Delete the specific consumption target value notification and back to the [Specific consumption target value monitoring] screen.

[No] button : Cancel the deletion, and back to the [Specific consumption target value monitoring] screen.

After deletion, the information of the deleted specific consumption target value monitoring notification is removed from the list in the dialog box of [Specific consumption target value monitoring].



Remarks

- It can be also deleted by clicking the [Delete] button in the dialog box of [Registration of specific consumption target value monitoring notification].

Editing the registered specific consumption target value monitoring notification

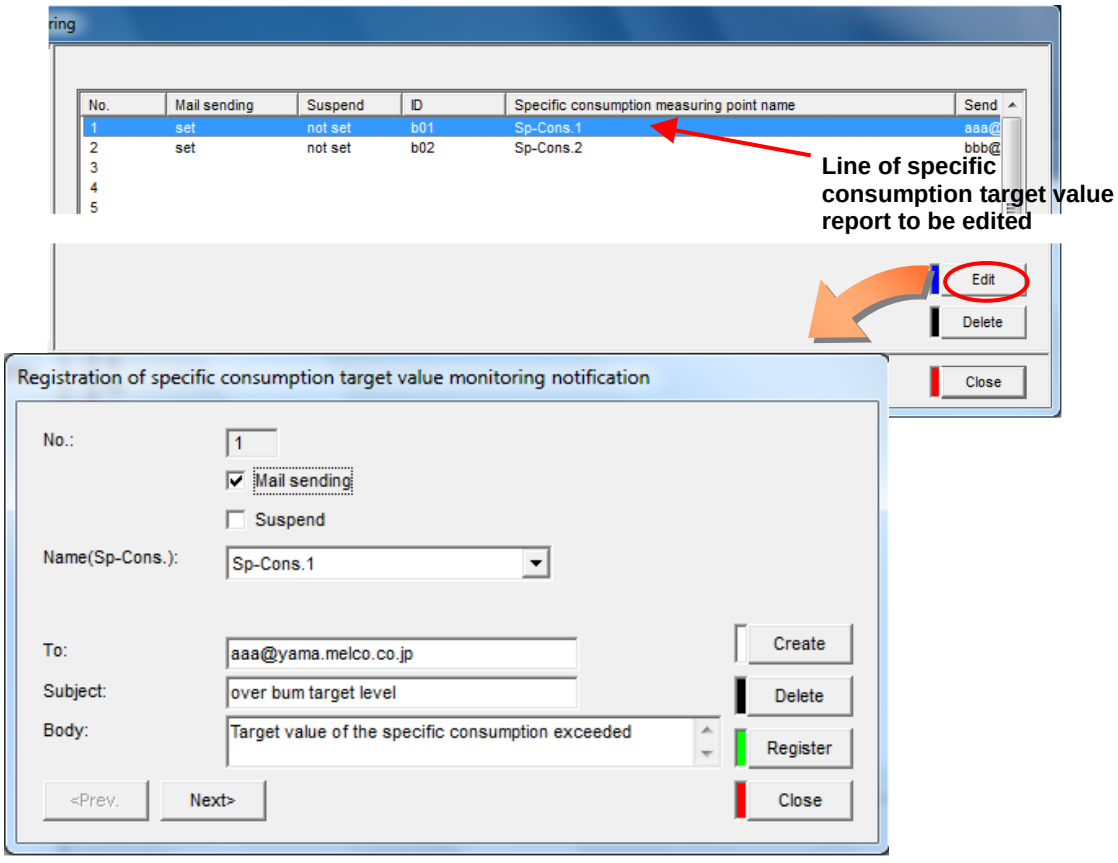
This section explains the procedure to edit the registered specific consumption target value monitoring notification.

1 Displaying the [Specific consumption target value monitoring] screen

Click the [Specific consumption target value monitoring] in the tree menu on the external device coordination setting screen.

2 Selecting the specific consumption target value notification to be edited, and clicking the [Edit] button

Double-click the line of the specific consumption target value monitoring notification to be edited in the list on the [Specific consumption target value monitoring] screen, or select the line of the specific consumption target value monitoring notification to be edited, and click the [Edit] button.



3 Editing the items to be changed and registering them

Edit the item to be changed and then click the [Register] button.

* The input information and input conditions for each item are identical to those for new registration of the specific consumption target value monitoring notification.

4.8.11. Energy planning value monitoring notification registration

This section explains the operation procedure in the [Energy planning value monitoring].
After registration of the energy plan value monitoring notification, a mail notice can be sent when the measuring point's monthly integrated value exceeds the daily integrated value of the month's planned value.
Up to 255 points can be registered for energy plan value monitoring notification.
However, the target points are the measuring points for integrated value **only.**

Remarks

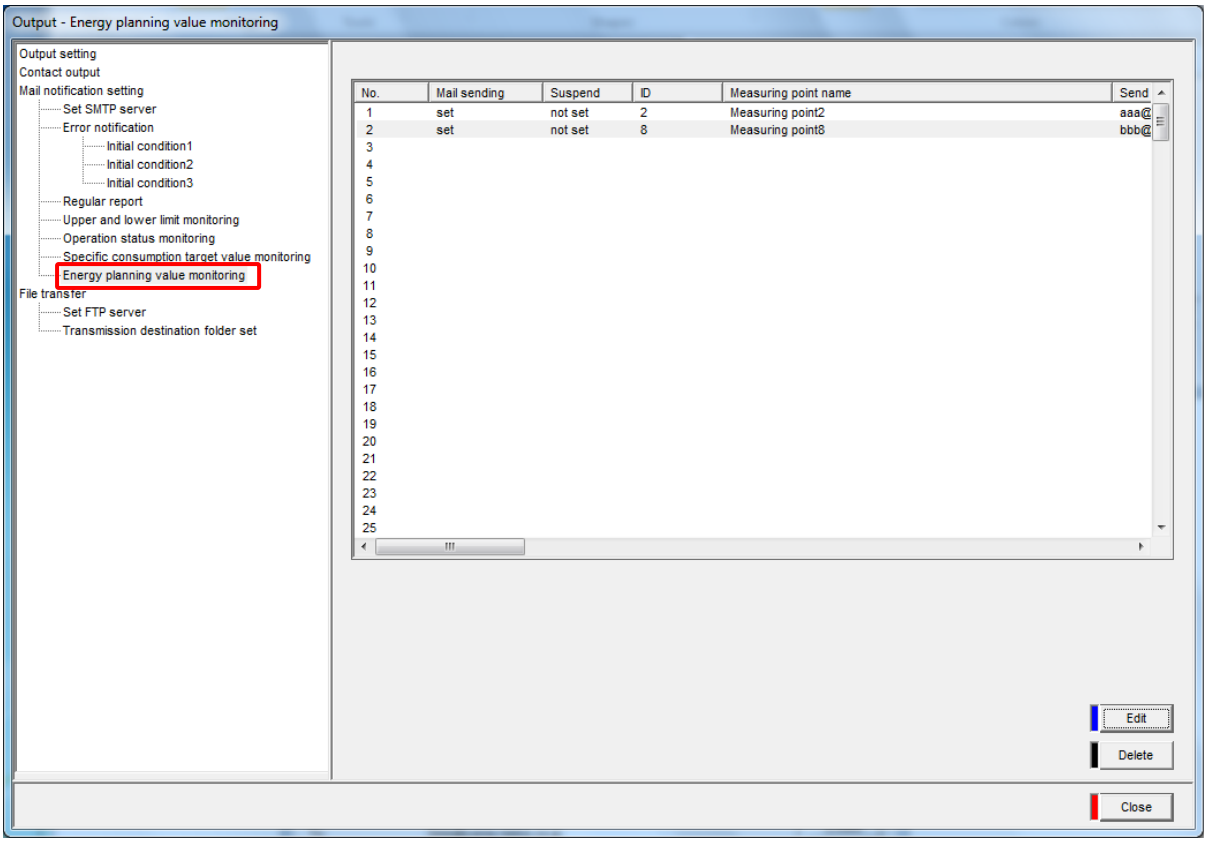
- The monitoring cycle is one day.
- If no measuring point of integrated value data type is registered, or if the measuring point's is not set for energy plan value monitoring, the energy plan value monitoring notification cannot be registered.
- Each measuring point can have only one registration of the energy plan value monitoring notification.
- **Set the plan value from the Web screen of the EcoWebServerIII.**
  (☞ Refer to **"Chapter 8 Setting of Planned/Target values" in Instruction Manual – Operation**.)

Confirming the list of registered energy planning value notifications

This section explains the procedure for displaying and checking the list of registered energy plan value monitoring notifications.

1 Displaying the [Energy planning value monitoring] screen

Click the [Energy planning value monitoring] in the tree menu on the [Output] screen.



2 Checking the registration information

Check the following information displayed on the list.

[No.]	: Energy plan value monitoring notification No.
[Mail sending]	: Active or inactive status of energy plan value monitoring notification (by mail)
[Suspend]	: Active or inactive status of temporarily holding of mail transmission
[ID]	: Measuring point ID of energy plan value monitoring notification
[Measuring point name]	: Measuring point name of energy plan value monitoring notification
[Send To]	: Destination address of energy plan value monitoring notification mail
[Subject]	: Subject of energy plan value monitoring notification mail
[Body]	: Text of energy plan value monitoring notification mail

Registering a new energy planning value notification

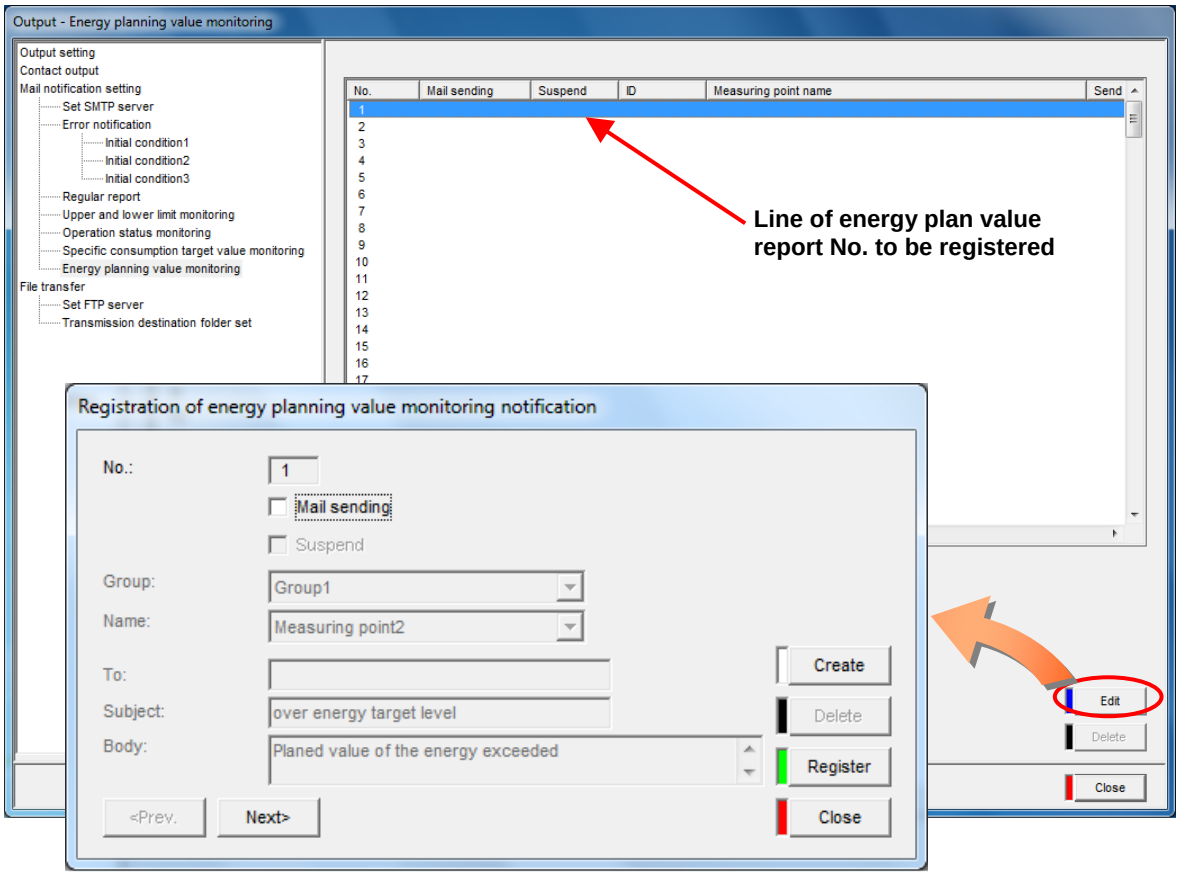
This section explains the procedure for registering a new energy plan value monitoring notification (by mail).

1 Displaying the [Energy planning value monitoring] screen

Click the [Energy planning value monitoring] in the tree menu on the [Output] screen.

2 Displaying the dialog box of [Registration of energy planning value monitoring notification]

Double-click the line of the energy plan value monitoring notification No. to be registered on the [Energy planning value monitoring] screen or select the line of the energy plan value monitoring notification No. to be registered, and click the [Edit] button.



3 Setting the active/inactive status of notification

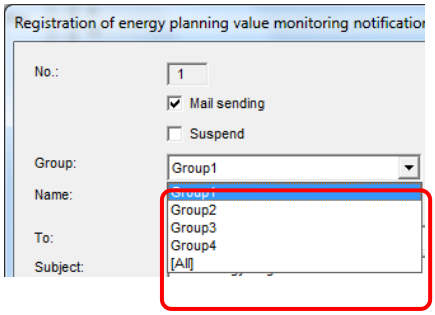
(1) To send the energy plan value monitoring notification mail, check the [Mail sending].

(2) To hold the mail temporarily when sending a mail, check the [Suspend] check box.

4 Specifying the measuring point to notification

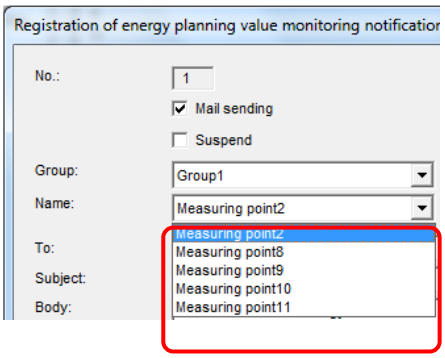
Select the measuring points for energy plan value monitoring notification.

(1) Select [Group].



(2) Select the measuring points for energy plan value monitoring notification from the measuring points including in the group selected in (1).

* Only the measuring points for energy plan value notification are displayed in the pull-down menu.



5 Setting the destination address, subject and text of the mail notification

Set this information only when [Mail sending] is checked. The entry conditions are listed below.

[To]	Characters	Up to 50 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? “ < > |
[Subject]	Default	Over energy target level
	Characters	Up to 30 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? “ < > |
[Body]	Default	Energy plan value is exceeded.
	Characters	Up to128 characters
	Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? “ < > |

6 Registering

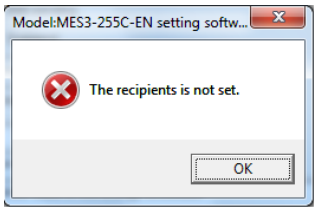
Click the button in the dialog box of [Registration of energy planning value monitoring notification] to register.

[Register] button : Register the set details of energy plan value monitoring notification

[Close] button : Back to the [Energy planning value monitoring] screen.

* If the set details are not proper, an error message as shown on the right is displayed when clicking the [Register] button according to the error details. Reset the details so as to meet the conditions of each item.

(Example of display)

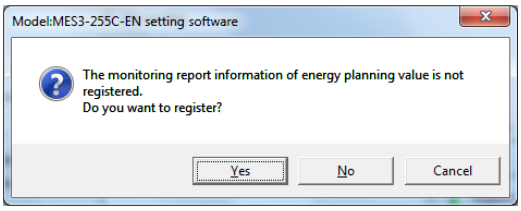


*2 After modification of entry details of each item, click the [Create], [< Prev.], [Next>] or [Close] button instead of clicking the [Register] button, the message shown on the right is displayed.

[Yes] button : To register

[No] button : Not to register

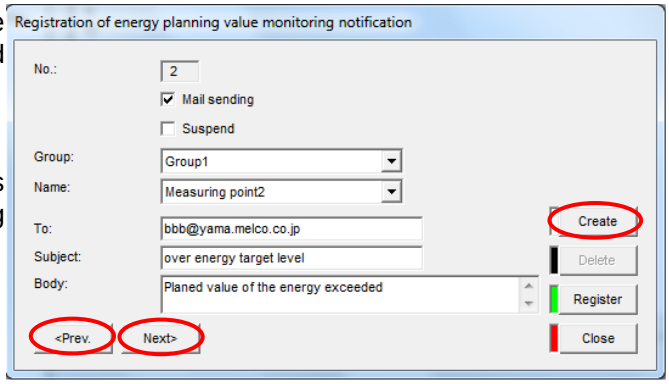
[Cancel] button : Back to the dialog box of [Registration of energy plan value monitoring settings]



<For continuous registration of energy plan value monitoring notification >

For continuous registration of energy plan value monitoring notification, click the [Create] button and repeat the steps from 3 to 6.

To confirm, delete or change the previous registration of energy plan value monitoring notification, click the [<Prev.] button.
To confirm, delete or change the next registration of energy plan value monitoring notification, click the [Next>] button.



Deleting the registered energy planning value monitoring notification

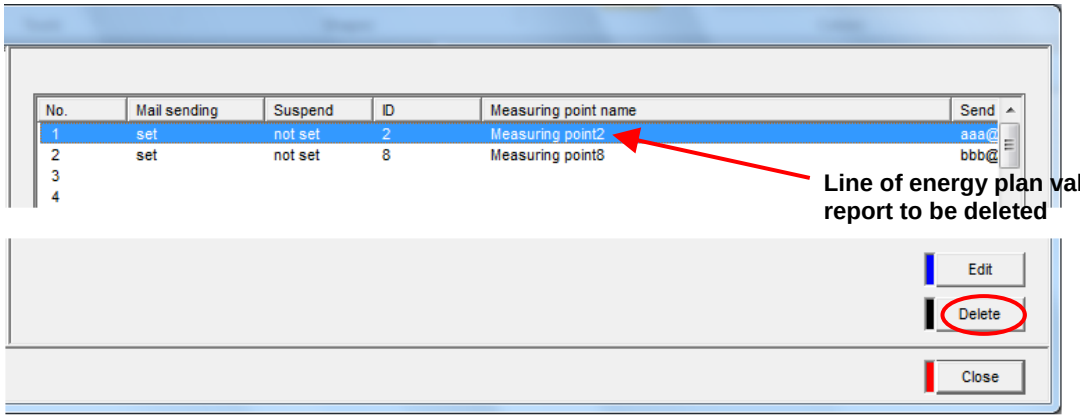
This section explains the procedures for deleting a registered energy plan value monitoring notification.

1 Displaying the [Energy planning value monitoring] screen

Click the [Energy planning value monitoring] in the tree menu on the [Output] screen.

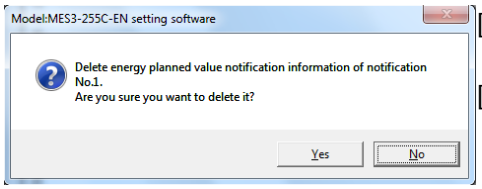
2 Selecting the energy plan value notification to be deleted, and clicking the [Delete] button

Select the line of the energy plan value notification to be deleted from the [Energy planning value monitoring] screen, and click the [Delete] button.



3 Deleting

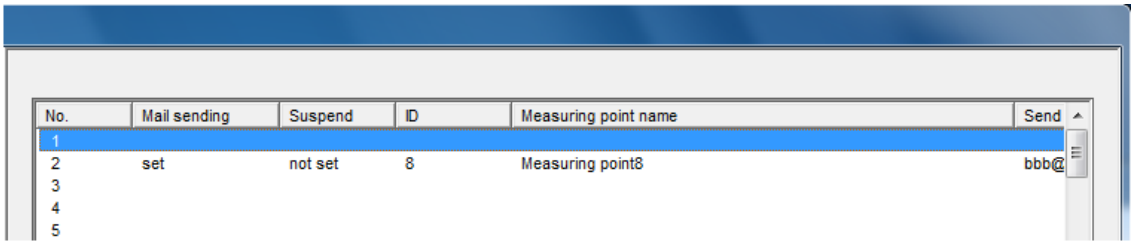
The message confirming deletion is displayed. Click the button to execute deletion.


Model:MES3-255C-EN setting software
Delete energy planned value notification information of notification No.1.
Are you sure you want to delete it?
Yes
No

[Yes] button : Delete the energy plan value notification, and back to the [Energy planning value monitoring] screen.

[No] button : Cancel the deletion, and back to the [Energy planning value monitoring] screen.

After deletion, the information of the deleted energy plan value monitoring notification is removed from the list in the dialog box of [Energy planning value monitoring].



Remarks

- It can be also deleted by clicking the [Delete] button in the dialog box of [Registration of energy planning value monitoring notification].

Editing the registered energy plan value monitoring notification

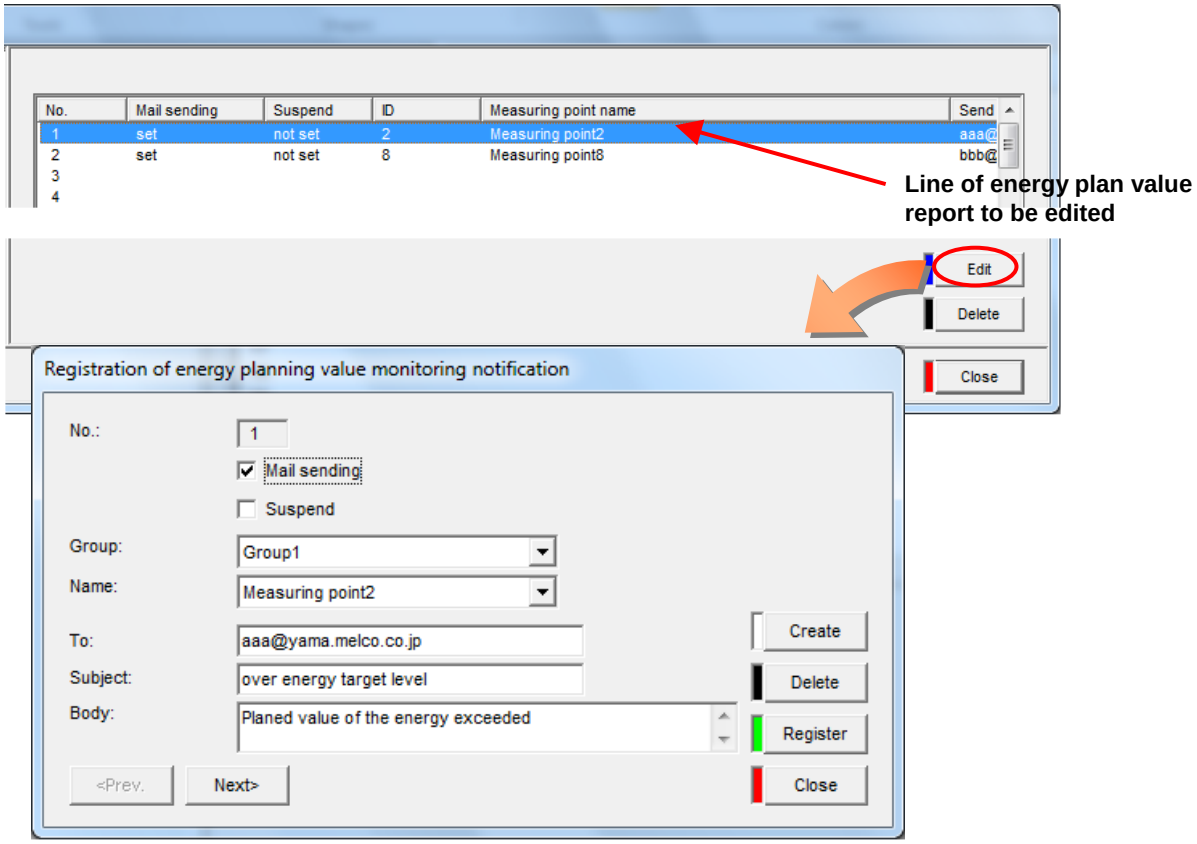
This section explains the procedure for editing the registered energy plan value monitoring notification.

1 Displaying the [Energy planning value monitoring] screen

Click the [Energy planning value monitoring] in the tree menu on the [Output] screen.

2 Selecting the energy plan value report to be edited, and clicking the [Edit] button

Double-click the line for the energy plan value monitoring notification to be edited in the list on the [Energy planning value monitoring] screen, or select the line for the energy plan value monitoring notification to be edited, and click the [Edit] button.



3 Editing the items to be changed and registering them

Edit the item to be changed and then click the [Register] button.

* The input information and input conditions for each item are identical to those for new registration of the energy plan value monitoring notification.

4.8.12. FTP server setting

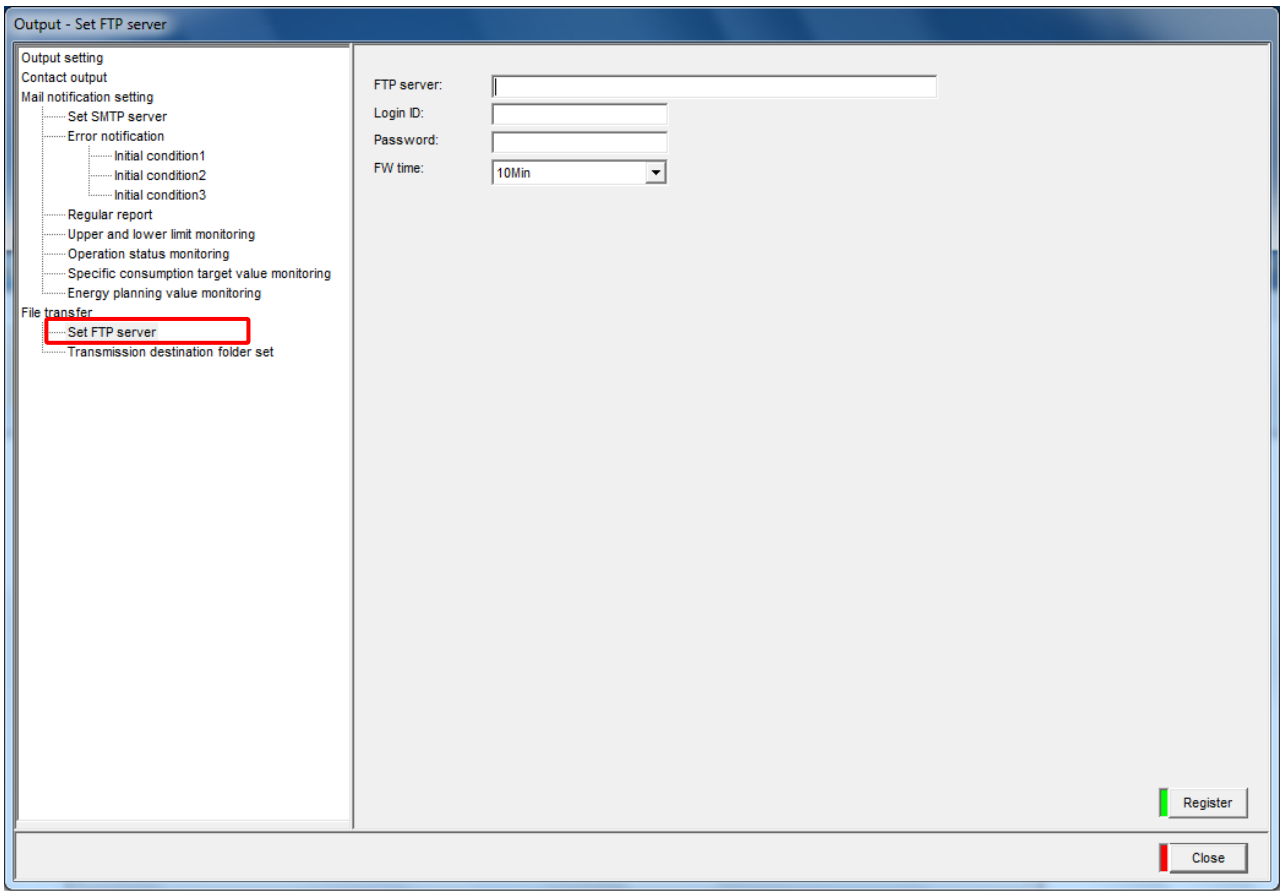
This section explains the operation procedures for [Set FTP server].

* **For installing and setting the FTP (file) server and inquiring technical questions about it, consult with your network administrator (or an applicable department of your company) or your vendor.**
* **The file transfer destination FTP server must support the passive mode.**

Setting the FTP server information

1 Displaying the [Set FTP server] screen

Click the [Set FTP server] in the tree menu on the [Output] screen.



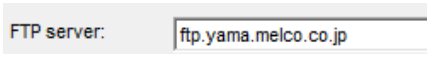
2 Inputting the login information

Set the information of the FTP server to which the data is transferred.

(1) [FTP server]

Input a domain name or IP address of the FTP server from the keyboard.

- For inputting a domain name



Number of characters	Up to 50 characters
Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? “ < > |

* Setting of the DNS server is required.

- For inputting an IP address

Input range	0 to 255
Values prohibited to register	0.0.0.0, xxx.xxx.xxx.255 (xxx: any numerical value)

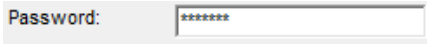
(2) [Login ID]

Input the login ID set to the FTP server from the keyboard.

Number of characters	Up to 16 characters
Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? “ < > |

(3) [Password]

Input the password set in the FTP server from the keyboard.

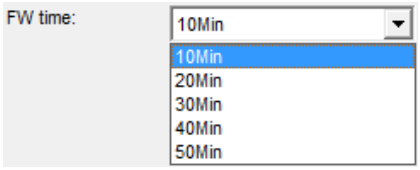


Number of characters	Up to 16 characters
Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? “ < > |

* A typed password will be displayed as asterisk (*).

(4) [FW time]

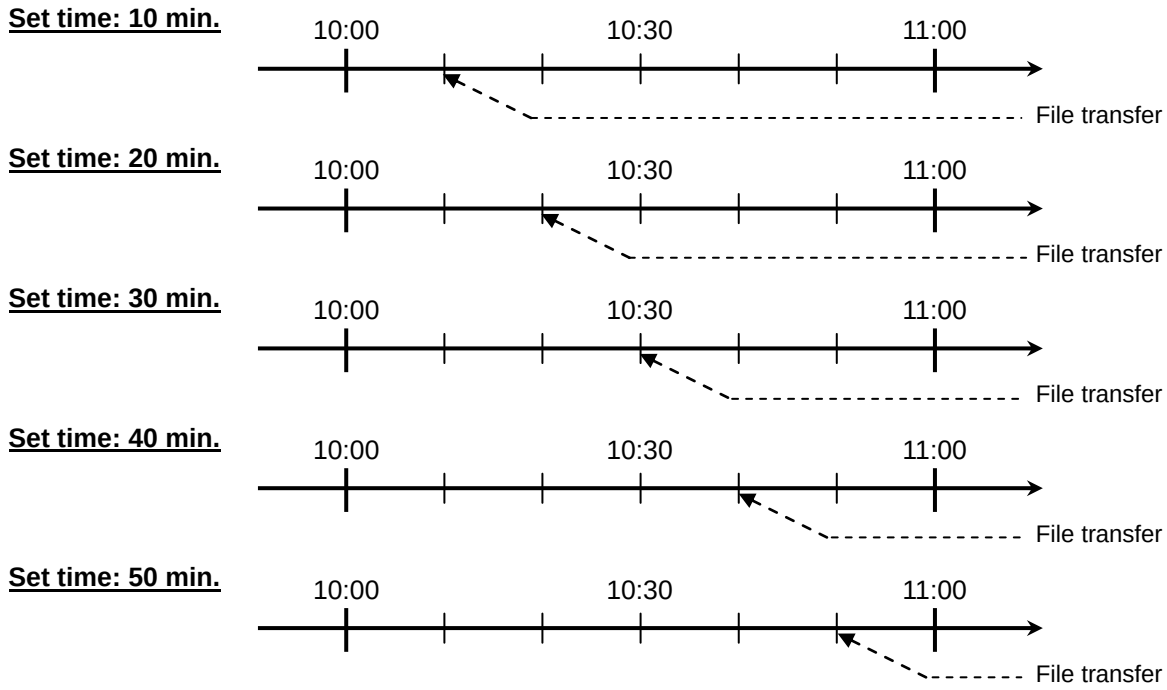
Select the time to transfer the file.



Selection range	[10 min.], [20 min.], [30 min.], [40 min.] or [50 min.]
Default value	[10 min.]

<About the time to transfer a file>

As the following charts, the file is transferred to the FTP server at the set time of every hour (minutes).



<About the timing of file transfer>

The following table shows the transfer timing for each file.

File	Transfer timing	
Daily data	xx minutes of every hour	(xx is the set time to transfer.) (mm is the monthly logging time.) (yy is the annual logging time.)
Monthly data	mm:xx every day	
Annual data	yy, yy:xx every month	
Zoom (5 min.) data	xx minutes of every hour	
Zoom (1 min.) data	xx minutes of every hour	
Virtual (daily) data	xx minutes of every hour	
Virtual (monthly) data	mm:xx every day	
Virtual (annual) data	yy, yy:xx every month	
Specific consumption (daily) data	xx minutes of every hour	
Specific consumption (monthly) data	mm:xx every day	
Specific consumption (annual) data	yy, yy:xx every month	
Equipment (daily) data	xx minutes of every hour	
Operation history data	xx minutes of every hour (Update file only)	
System log	xx minutes of every hour (Update file only)	
Demand (daily) data	xx minutes of every hour	
Demand (monthly) data	mm:xx every day	
Demand (annual) data	yy, yy:xx every month	
Demand alarm/control history data	xx minutes of every hour	

3 Registering

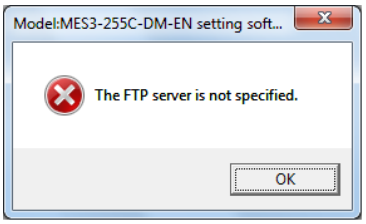
Click the button in the dialog box of [Set FTP server] to register.

[Register] button : Register the file transfer setting as the set details.

[Close] button : Back to the [Project setting] screen.

*1 If the set details are not proper, an error message as shown on the right is displayed when clicking the [Register] button according to the error details. Reset the details so as to meet the conditions of each item.

(Example of display)

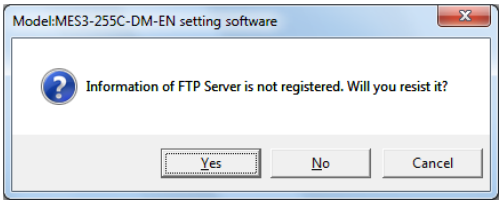


*2 After modification of entry details of each item, click the [Close] button instead of clicking the [Register] button or another tree menu is selected, the message shown on the right is displayed.

[Yes] button : To register

[No] button : Not to register.

[Cancel] button : Back to the [FTP server setting] dialog box



Remarks

- Since any data in the FTP server is not deleted, clean up the server by deleting the data at regular intervals.
- When designating the FTP server by domain name, make sure to set up the DNS server.
  (☞ Refer to 4.7.1 IP address settings, Setting the DNS server.)

  * **For installing and setting the DNS server (name server) and inquiring technical questions about it, consult with your network administrator (or an applicable department of your company).**

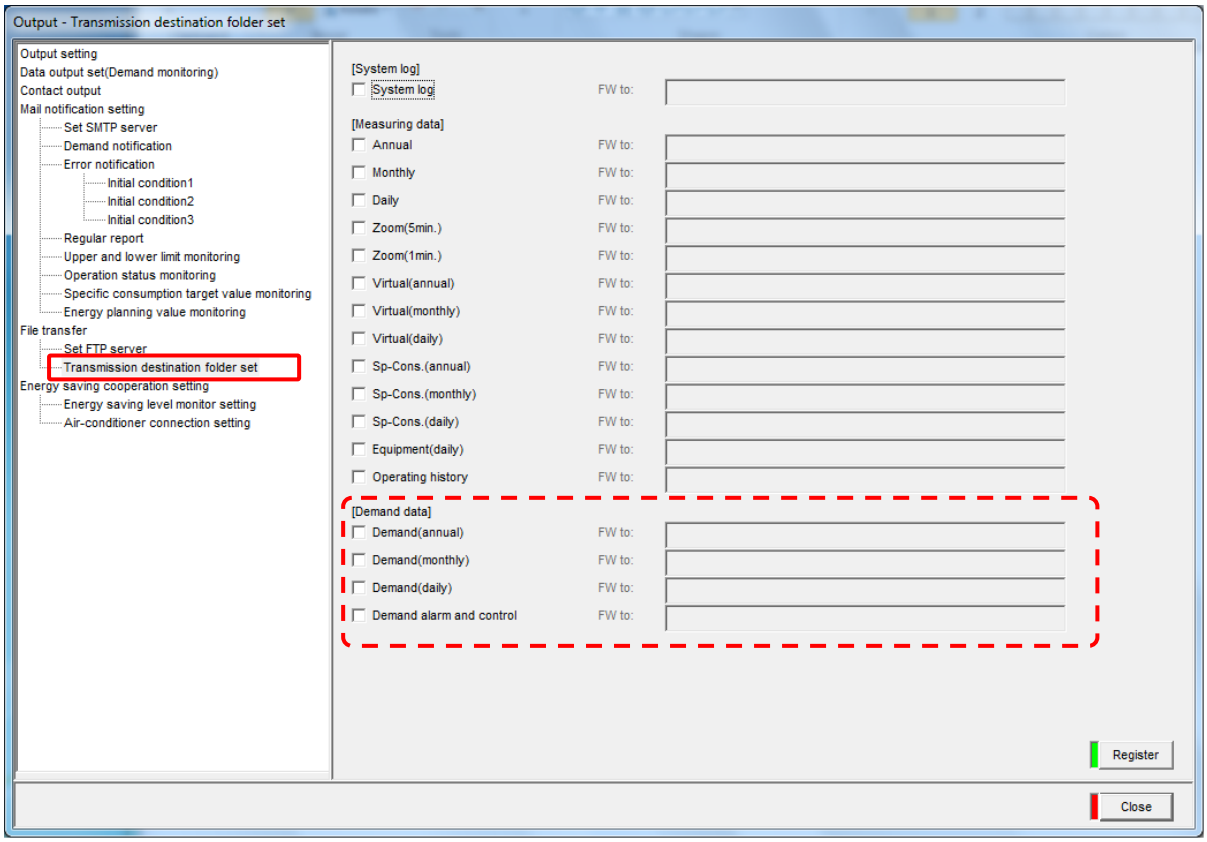
4.8.13. Transfer enable/disable, transfer destination folder setting

This section explains the operation procedures for [Transmission destination folder set]
This section explains the setting for transferring the CSV format data files (daily, monthly, annual, zoom, etc.) and the system log to the FTP (file) server.

Setting files transferred and destination addresses

1 Displaying the [Transmission destination folder set] screen

Click the [Transmission destination folder set] in the tree menu on the [Output] screen.

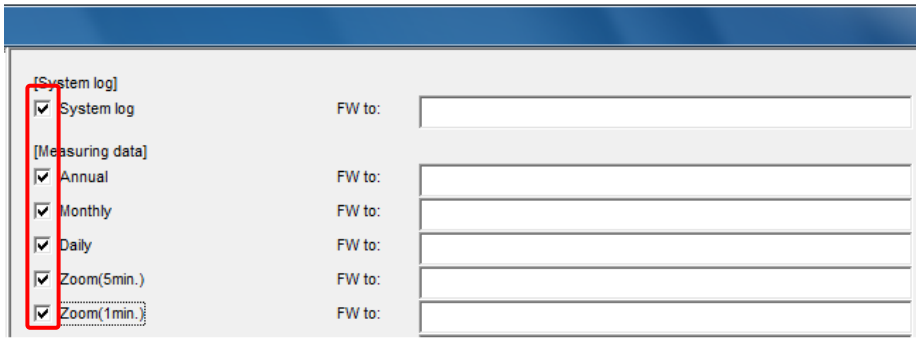


*** The demand data appears only on the EcoWebServerIII with demand control function.**

2 Inputting the file transfer information

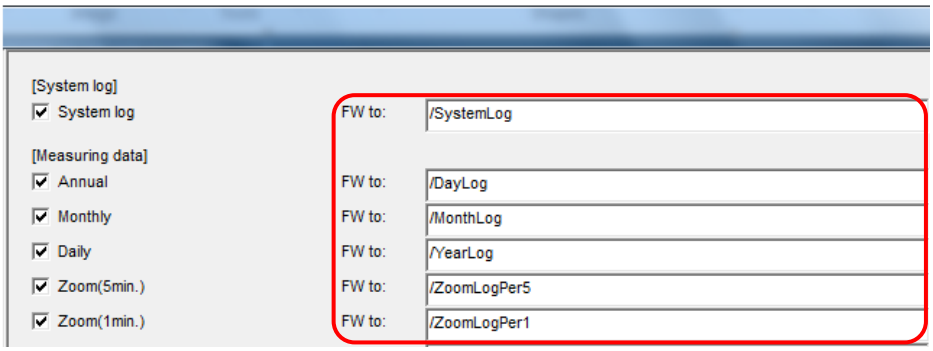
Select the data to transfer and set the transfer destination (path name in FTP server).

(1) Check the check boxes of the files to be transferred



*** After checking the check boxes, input of the [FW to] area becomes available.**

(2) Input the destination addresses (path names in the FTP server).



For each destination address (path name in the FTP server), specify a relative address (a folder name viewed from the FTP login folder).
For example, if logging in d://EcoWebServer/data/ and transferring a file to d://EcoWebServer/data/DayLog, specify the file name as /DayLog.

*** Since the specification manner varies depending on a FTP server, consult the FTP server instruction manual or consult with your vendor.**

The followings are the input conditions for the destination addresses.

Number of characters	Up to 50 characters
Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? “ < > | **(* Replace the symbol ¥ with / when entering it.)**

3 Registering

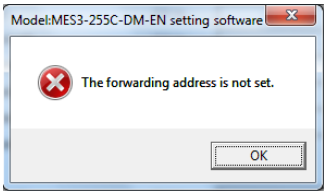
Click the button in the dialog box of [Transmission destination folder set] to register.

[Register] button : Register the file transfer setting as the set details.

[Close] button : Back to the project setting dialog box.

*1 If the set details are not proper, an error message as shown on the right is displayed when clicking the [Register] button according to the error details. Reset the details so as to meet the conditions of each item.

(Example of display)

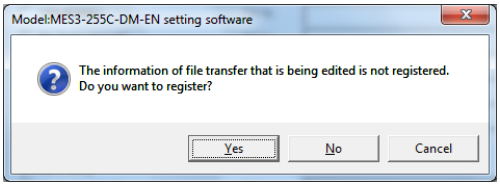


*2 After modification of entry details of each item, click the [Close] button instead of clicking the [Register] button or another tree menu is selected, the message shown on the right is displayed.

[Yes] button : To register

[No] button : Not to register.

[Cancel] button : Back to the dialog box of [Transfer enable/ disable, transfer destination folder setting]



4.8.14. Energy saving level monitor setting (Only for models with demand control function)

This section explains the operation procedure for [Energy saving level monitor setting].

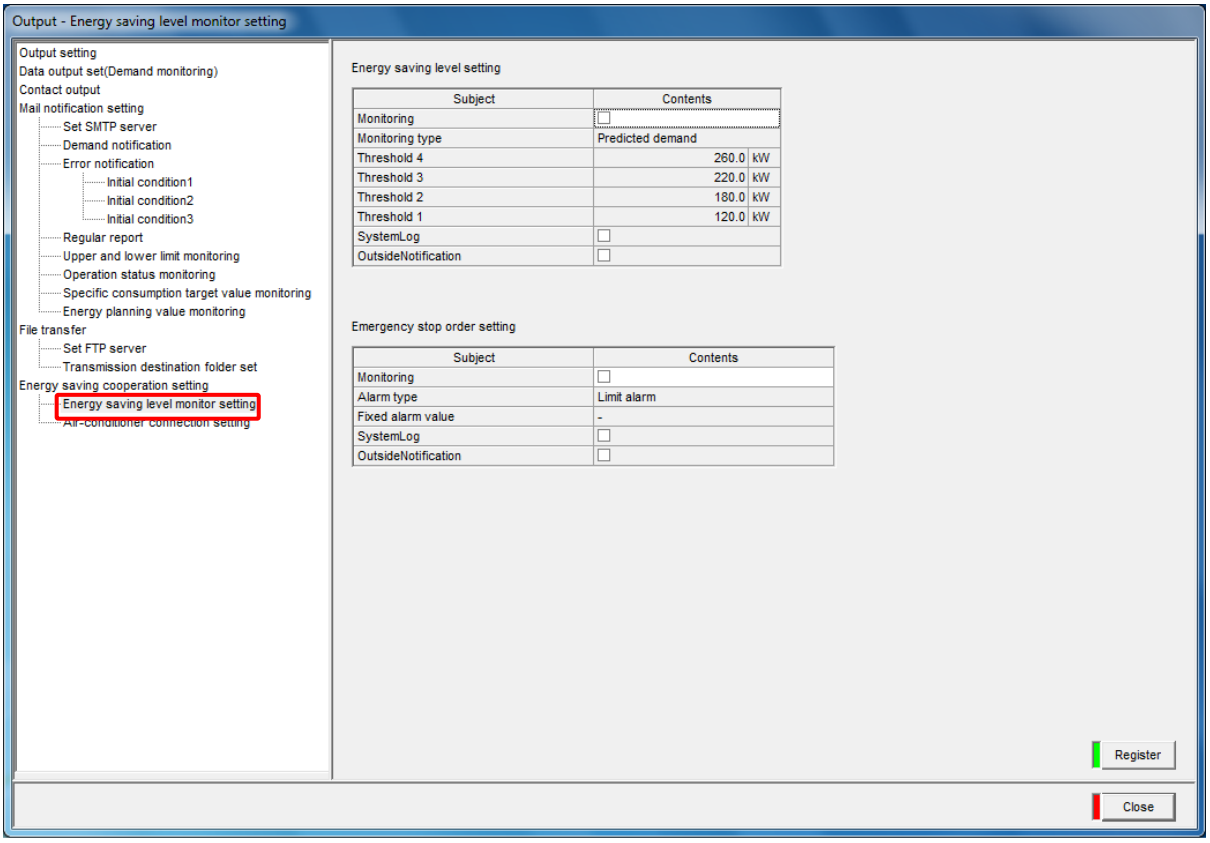
*** The energy saving level monitor setting sets the function used in coordination with the Air-conditioner. These settings are not required when not using functions in coordination with this controller.**

*** The energy saving level monitor setting screen and the external transmission must be enabled to use the coordination function.**

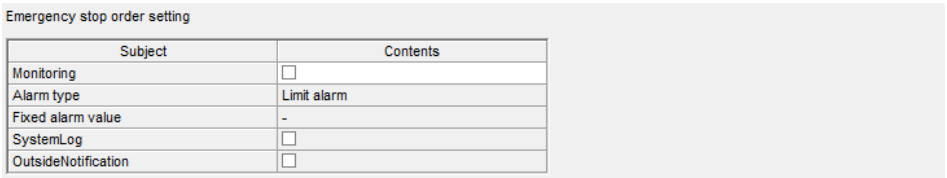
Setting the energy saving level setting and emergency stop order setting

1 Displaying the [Energy saving level monitor setting] screen

Click the [Energy saving level monitor setting] screen in the tree menu on the [Output] screen.



*** If the alarm type is set to "Limit alarm", the emergency stop order setting will appear as follows.**

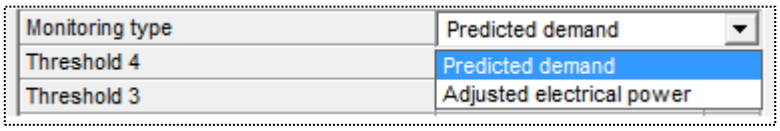


2 Setting the energy saving level monitoring

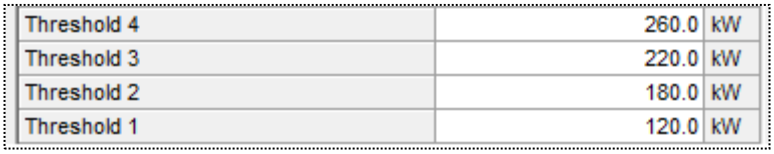
Set the energy saving level used as the source data for energy saving coordinated operation with the external device (air-conditioner).
Enter or select each of the following items.

(1) Click [Monitoring]. (The box will be checked.)

(2) Select [Monitoring type].



(3) Enter the threshold for each energy saving level in [Threshold 4], [Threshold 3], [Threshold 2] and [Threshold 1].



(4) Set whether or not to record the energy saving level in [System Log].

(5) Set whether to not to transmit the energy saving level in [Outside Notification].

***1 All thresholds 1 to 4 must be set.**

***2 If "Predicted demand" is selected for the monitoring type, enter the values so that Threshold 4 > Threshold 3 > Threshold 2 > Threshold 1.**

A value from 0.0 to 99999.9 can be entered.

The corresponding energy saving levels are as follow:

Level 4 ≥ Threshold 4 > Level 3 ≥ Threshold 3 > Level 2 ≥ Threshold value 2 > Level 1 ≥ Threshold value 1 > Level 0

***3 If "Adjusted electrical power" is selected for the monitoring type, enter the values so that Threshold 4 < Threshold 3 < Threshold 2 < Threshold 1.**

A value from -99999.9 to 99999.9 can be entered as the threshold.

The corresponding energy saving levels are as follow:

Level 4 ≤ Threshold 4 < Level 3 ≤ Threshold 3 < Level 2 ≤ Threshold value 2 < Level 1 ≤ Threshold value 1 < Level 0

***4 The setting will not be not accepted if the threshold 1 to 4 order is reversed.**

3 Setting the emergency stop order monitoring

The emergency stop order is linked with the limit alarm or fixed alarm during demand control.
To change the monitoring method or related values (base power, fixed alarm value), the settings must be changed on the Demand alarm and control setting screen.
Set the following items.

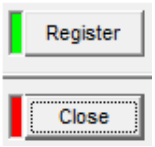
(1) Click [Monitoring]. (The box will be checked.)

(2) Set whether or not to record the emergency stop order in [System Log].

(3) Set whether to not to transmit the emergency stop order in [Outside Notification].

4 Registering

Click the button in the dialog box of [Energy saving level monitor setting] to register.

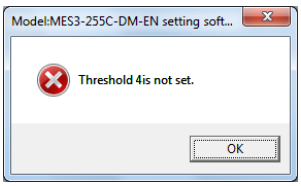


[Register] button : Register the set details of energy saving level monitor setting information.

[Close] button : Back to the project setting dialog box.

*1 If the set details are not proper, an error message as shown on the right is displayed when clicking the [Register] button according to the error details. Reset the details so as to meet the conditions of each item.

(Example of display)

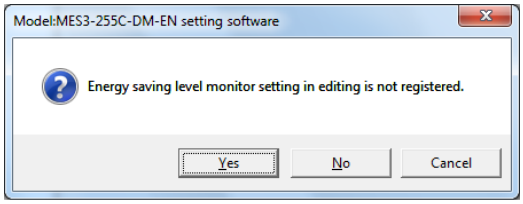


*2 After modification of entry details of each item, click the [Close] button instead of clicking the [Register] button or another tree menu is selected, the message shown on the right is displayed.

[Yes] button : To register

[No] button : Not to register.

[Cancel] button : Back to the dialog box of [Energy saving level monitor setting]



Remarks

- When enabling [Outside Notification] of the [Energy saving level monitoring] or [Emergency stop order monitoring], the outside device connection destination domain must be registered with the [Air-conditioner connection setting].

4.8.15. Air-conditioner connection settings (Only for models with demand control function)

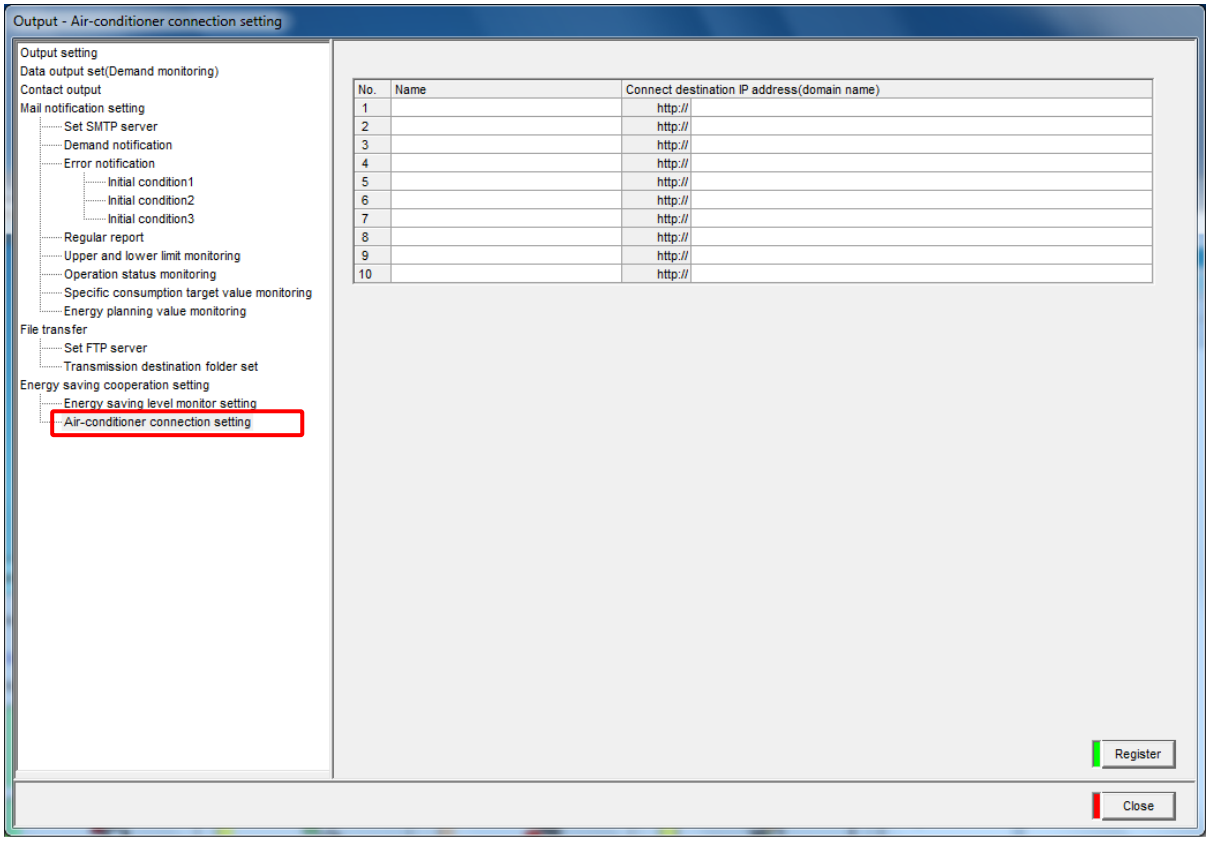
This section explains the operation procedures for [Air-conditioner connection setting].

∗ The air-conditioner connection setting is the address setting for the air-conditioner. This does not need to be set when not using the coordinated function with the controller.

Setting the air- conditioner connection

1 Displaying the [Air-conditioner connection setting] screen

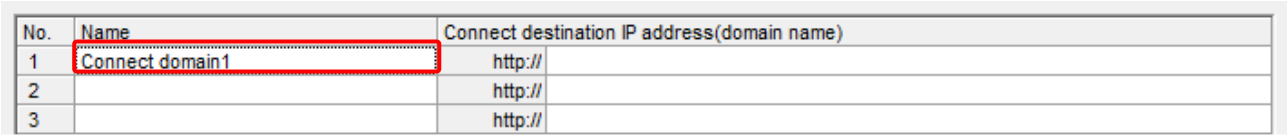
Click the [Air-conditioner connection setting] in the tree menu on the [Output] screen.



2 Setting the air-conditioner connection destination

Enter the information for the connected air controller.

(1) Enter the air conditioner connection name.

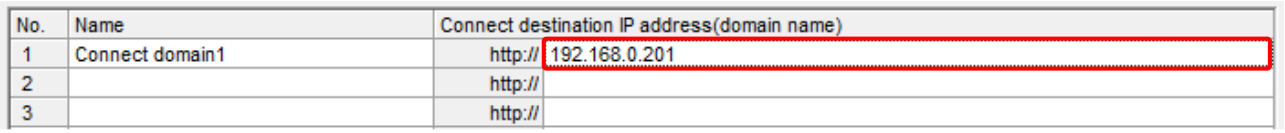


No.	Name	Connect destination IP address(domain name)	
1	Connect domain1	http://	
2		http://	
3		http://	

The conditions for entering the name are given below.

Number of characters	Up to 24 characters
Prohibited characters	The following characters cannot be registered: # ¥ : , ; * ? “ < > |

(2) Enter the IP address or domain name for connecting to the air conditioner.



No.	Name	Connect destination IP address(domain name)	
1	Connect domain1	http://	192.168.0.201
2		http://	
3		http://	

The conditions for entering the name are given below.

Number of characters	Up to 50 characters
Input conditions	Only the following characters can be used: A-Z, a-z, 0-9, -, ., :, /, _ Or, use a . (dot) at the head or end.

Remarks

- When designating the connection destination with a domain name, make sure to set up the DNS server.
  (☞ Refer to **4.7.1 IP address settings, Setting the DNS server**.)

* **For installing and setting the DNS server (name server) and inquiring technical questions about it, consult with your network administrator (or an applicable department of your company).**

3 Registering

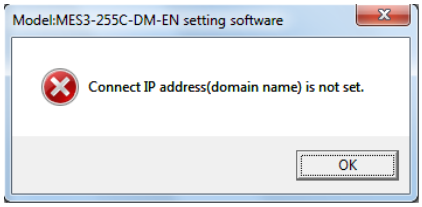
Click the button in the dialog box of [Air-conditioner connection setting] to register.

[Register] button : Register the set details of air-conditioner connection setting.

[Close] button : Back to the project setting screen.

*1 If the set details are not proper, an error message as shown on the right is displayed when clicking the [Register] button according to the error details.
Reset the details so as to meet the conditions of each item.

(Example of display)

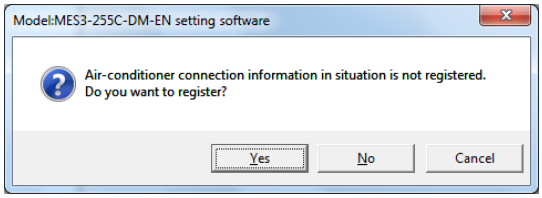


*2 After modification of entry details of each item, click the [Close] button instead of clicking the [Register] button or another tree menu is selected, the message shown on the right is displayed.

[Yes] button : To register

[No] button : Not to register.

[Cancel] button : Back to the dialog box of [Air-controller connection setting]

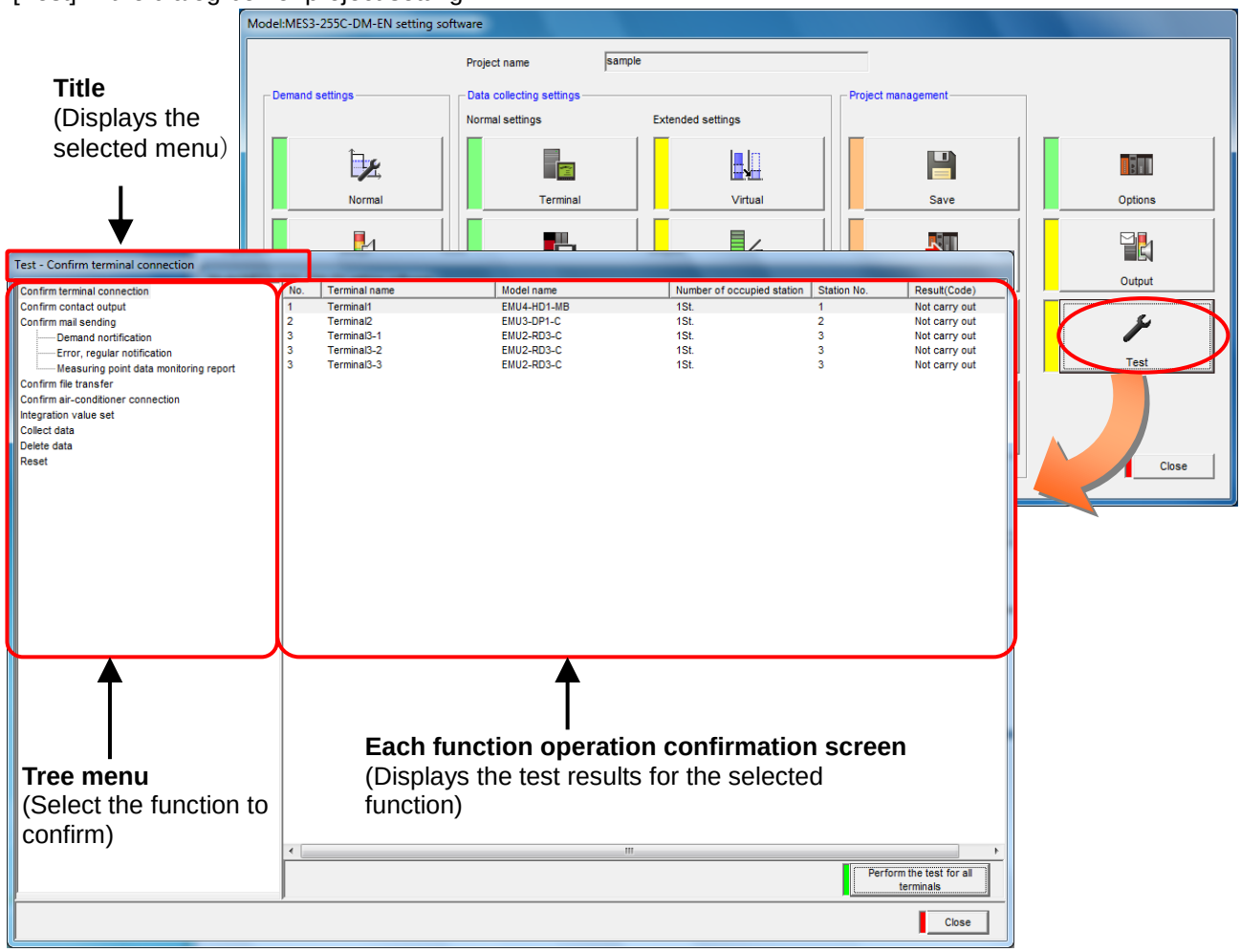


4.9. Test and Adjustment Function

This function is for operation check before starting operation.
Carefully read [1.3 Precautions for use], [3 Flow of settings], and [4 Operating procedures] before function check .

1 Displaying the [Test] dialog box

Click [Test] in the dialog box of project setting.



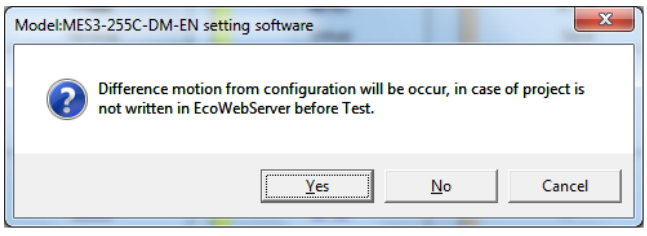
*** The Demand control and notification check, air-controller connection check and integrated count value setting functions are available only for the EcoWebServerIII with demand control function.**

2 Selecting the function to test and adjust from the tree menu

[Confirm terminal connection] is selected as the default.

Remarks

- If the setting is changed, the message on the right will appears.
  To test and adjust, click the [Yes] button and execute project writing.
- If you click the [Cancel] button, back to the [Project setting] dialog box.


Model:MES3-255C-DM-EN setting software
Difference motion from configuration will be occur, in case of project is not written in EcoWebServer before Test.
Yes
No
Cancel

4.9.1. Terminal connection check

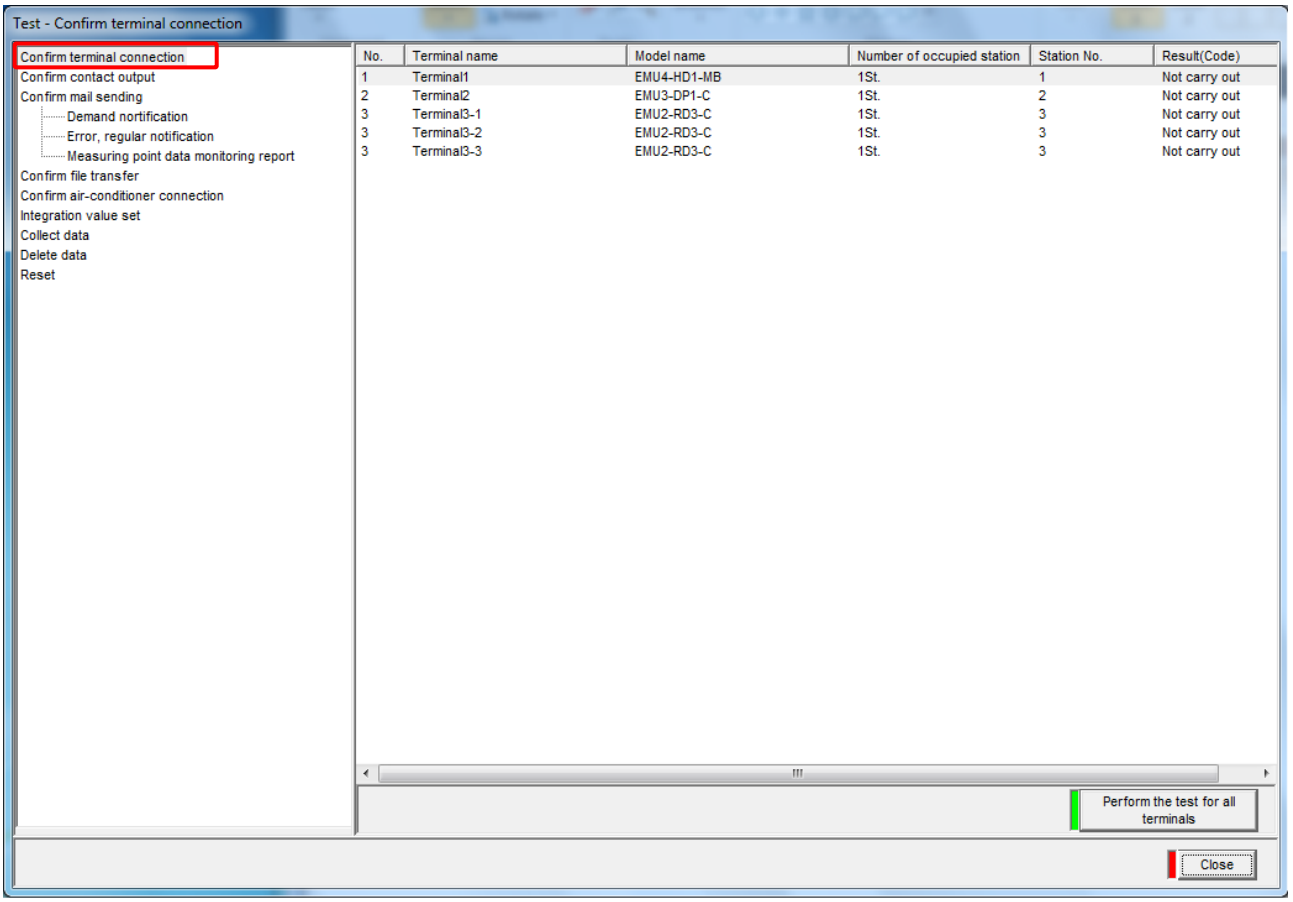
This section explains the operation procedure in the dialog box of [Confirm terminal connection].

Confirming the terminal connection state

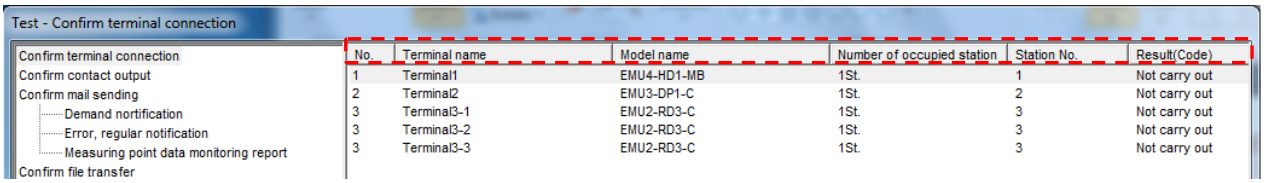
This section explains the procedure to confirm the terminal connection state.

1 Displaying the [Confirm terminal connection] dialog box

Click [Confirm terminal connection] in the tree menu on the [Test] dialog box.

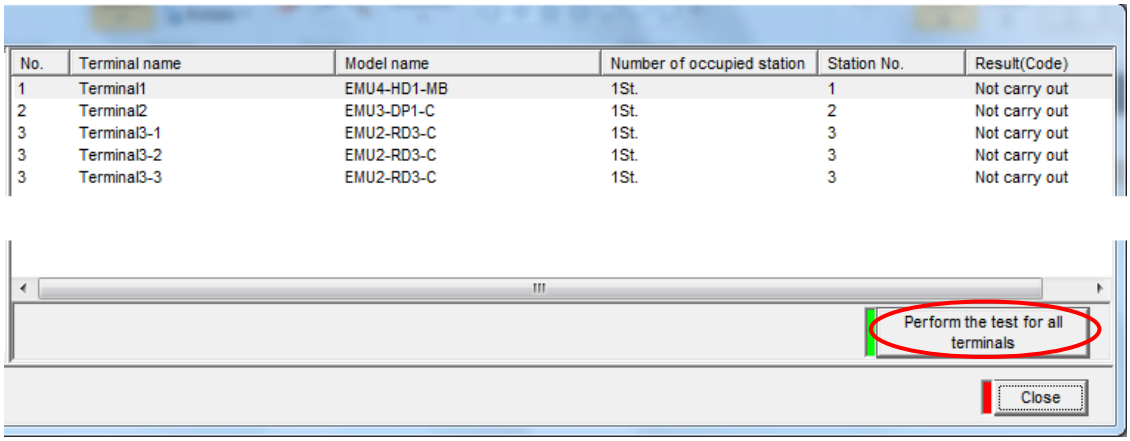


* **The following items appear in the list of terminals for CC-Link communication products and CC-Link communication products with demand control function.**

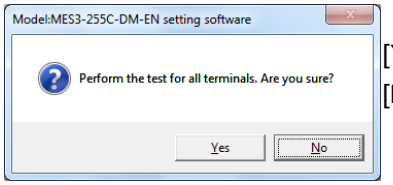

Test - Confirm terminal connection
Confirm terminal connection
Confirm contact output
Confirm mail sending
Demand nortification
Error, regular notification
Measuring point data monitoring report
Confirm file transfer
No.
Terminal name
Model name
Number of occupied station
Station No.
Result(Code)
1 Terminal1 EMU4-HD1-MB 1St. 1 Not carry out
2 Terminal2 EMU3-DP1-C 1St. 2 Not carry out
3 Terminal3-1 EMU2-RD3-C 1St. 3 Not carry out
3 Terminal3-2 EMU2-RD3-C 1St. 3 Not carry out
3 Terminal3-3 EMU2-RD3-C 1St. 3 Not carry out

2 Executing the connectivity check of all terminals

(1) Click the [Perform the test for all terminals] button on the [Confirm terminal connection] dialog box.

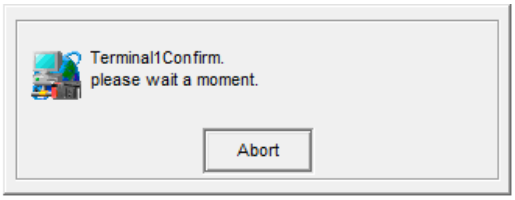

No.
Terminal name
Model name
Number of occupied station
Station No.
Result(Code)
1 Terminal1 EMU4-HD1-MB 1St. 1 Not carry out
2 Terminal2 EMU3-DP1-C 1St. 2 Not carry out
3 Terminal3-1 EMU2-RD3-C 1St. 3 Not carry out
3 Terminal3-2 EMU2-RD3-C 1St. 3 Not carry out
3 Terminal3-3 EMU2-RD3-C 1St. 3 Not carry out
Perform the test for all terminals
Close

(2) An execution confirmation message appears. Click [Yes] to execute the test.

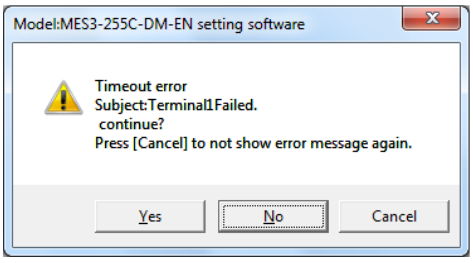


[Yes] button : Executes the connectivity check of the terminal.
[No] button : Cancels the connectivity check of the terminal, and back to the [Confirm terminal connection] dialog box.

(3) A dialog box that indicates the connectivity check is in progress will appear.
If you want to cancel it, click the [Abort] button.

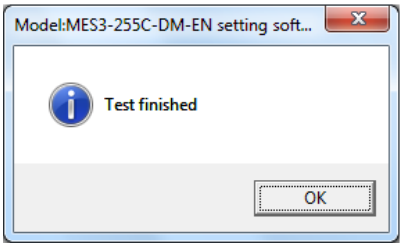


* If the IP address of the EcoWebServerIII main unit is not correct, a LAN cable is not connected, or the EcoWebServerIII is not powered on, the message on the right will appear.
Click the [No] button, and then check the IP address of the EcoWebServerIII, the LAN cable connection, etc., and the power.



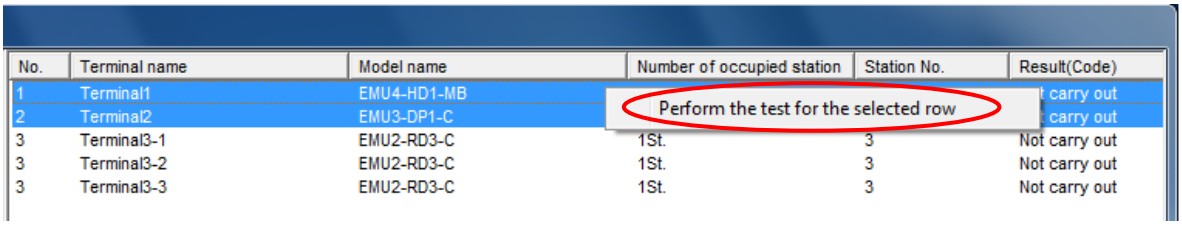
[Yes] button : Executes the connectivity check of the terminal.
[Cancel] button : Executes the connectivity check of the terminal.
However, error message does not appear even if error occurs.

(4) After the connectivity check on every registered terminal is completed, the completion message appears.
Click the [OK] button to back to the [Confirm terminal connection] dialog box.

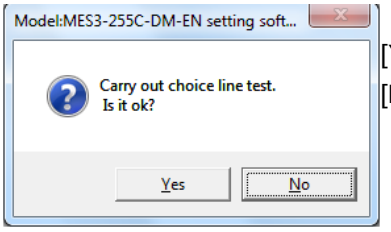


3 Executing the connectivity check of selected terminal

(1) Select the line of the terminal to confirm, and click the right-click menu of the [Perform the test for the selected row].

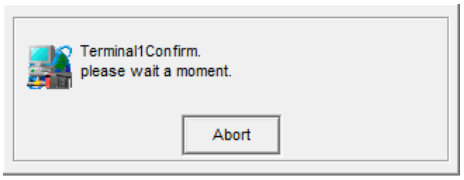

No.
Terminal name
Model name
Number of occupied station
Station No.
Result(Code)
1 Terminal1 EMU4-HD1-MB
2 Terminal2 EMU3-DP1-C
3 Terminal3-1 EMU2-RD3-C 1St. 3 Not carry out
3 Terminal3-2 EMU2-RD3-C 1St. 3 Not carry out
3 Terminal3-3 EMU2-RD3-C 1St. 3 Not carry out
Perform the test for the selected row

(2) An execution confirmation message appears. Click [Yes] to execute the test.

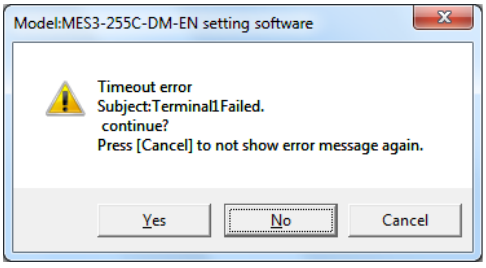


[Yes] button : Executes the connectivity check of the terminal.
[No] button : Cancels the connectivity check of the terminal, and back to the [Confirm terminal connection] dialog box.

(3) A dialog box that indicates the connectivity check is in progress will appear.
If you want to cancel it, click the [Abort] button.

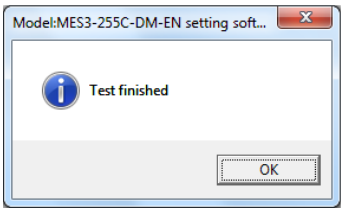


* If the IP address of the EcoWebServerIII main unit is not correct, a LAN cable is not connected, or the EcoWebServerIII is not powered on, the message on the right will appear.
Click the [No] button, and then check the IP address of the EcoWebServerIII, the LAN cable connection, etc., and the power.



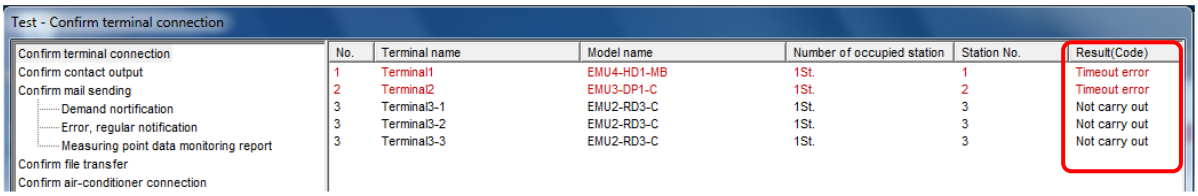
[Yes] button : Executes the connectivity check of the next terminal.
[Cancel] button : Executes the connectivity check of the next terminal.
However, error message does not appear even if error occurs.

(4) After the connectivity check on all selected terminal is completed, the completion message appears.
Click the [OK] button to back to the [Confirm terminal connection] dialog box.



4 Checking the results of the connectivity check

The result of the connectivity check is shown in the [Result (code)] column on the [Confirm terminal connection] dialog box.


Test - Confirm terminal connection
Confirm terminal connection
Confirm contact output
Confirm mail sending
Demand nortification
Error, regular notification
Measuring point data monitoring report
Confirm file transfer
Confirm air-conditioner connection
No.
Terminal name
Model name
Number of occupied station
Station No.
Result(Code)
1 Terminal1 EMU4-HD1-MB 1St. 1 Timeout error
2 Terminal2 EMU3-DP1-C 1St. 2 Timeout error
3 Terminal3-1 EMU2-RD3-C 1St. 3 Not carry out
3 Terminal3-2 EMU2-RD3-C 1St. 3 Not carry out
3 Terminal3-3 EMU2-RD3-C 1St. 3 Not carry out

The connectivity check is performed for each terminal and shows the results as below.

OK	: The terminal with corresponding station No. is connected.
Terminal transmission error (XXXXX)	: The communication error, such as the terminal is not power ON, the connection is not proper, or the setting of the station number is not correct. (XXXXX refers to an error code.) (☞Refer to **"5.15 List of error codes"**.)

* If the terminal error (EXXXX) or terminal error (XXXXX) occurs, investigate the cause based on the error code provided, and then review the registration information of the terminal or check the installation condition of the terminal again.

Remarks

- If the CC-Link terminal with the appropriate station number is connected, the result of the connectivity check should be OK even if the "terminal name you set" is different from the "terminal actually connected." Please be careful.

4.9.2. Contact output operation check

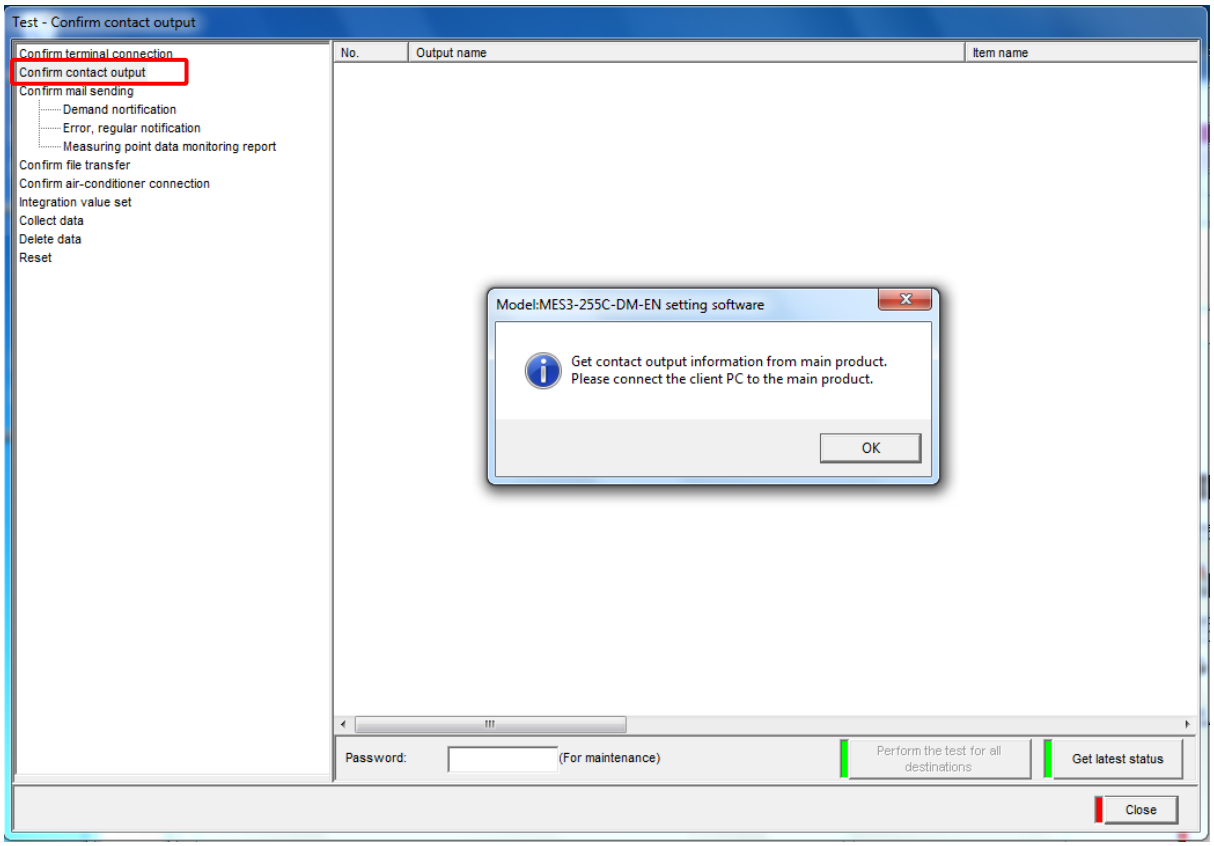
This section explains the procedures in the dialog box of [Confirm contact output].

Confirming the contact output operation

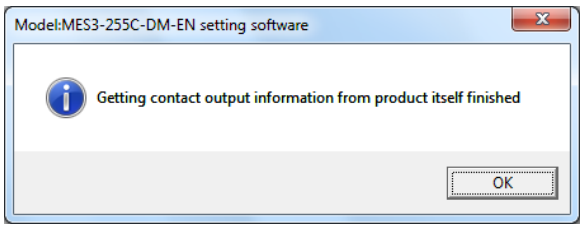
This section explains the procedure to confirm the contact output operation.

1 Displaying the [Confirm contact output] dialog box

(1) Click [Confirm contact output] in the tree menu on the [Test] dialog box.
The following confirmation message appears. Check the connection with the EcoWebServerIII, and then click the [OK] button.



(2) When the retrieval of the contact output information from the EcoWebServerIII is completed, the completion message appears. Click the [OK] button.

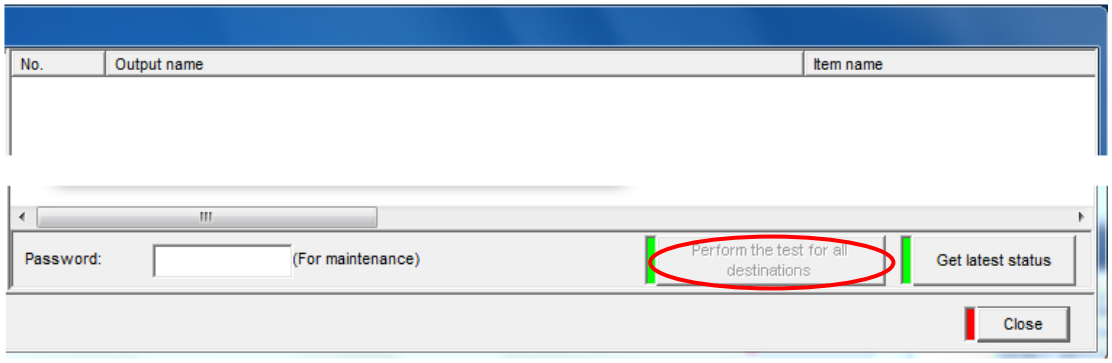


2 Testing all output destinations

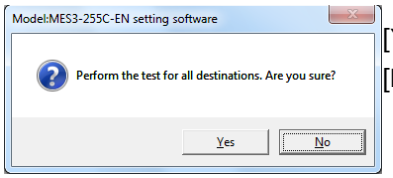
(1) Type in the maintenance password.

(The default maintenance password is “ecopass”.)

(2) Click the [Perform the test for all destinations] button on the [Confirm contact output] dialog box.

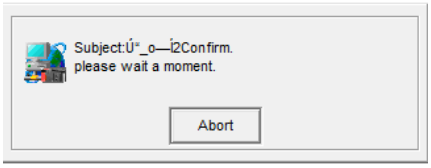


(3) An execution confirmation message appears. Click [Yes] to execute the test.

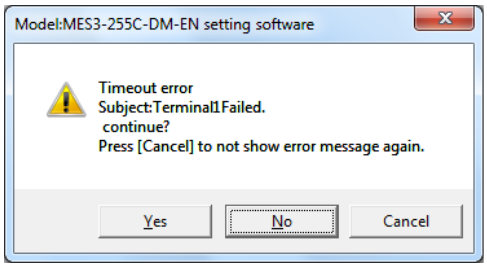


[Yes] button : Executes the contact output operation check.
[No] button : Cancels the contact output operation check, and back to the [Confirm contact output] dialog box.

(4) A dialog box that indicates the contact output operation check is in progress will appear.
If you want to cancel it, click the [Abort] button.

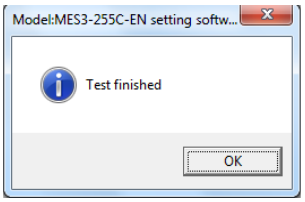


* If the IP address of the EcoWebServerIII main unit is not correct, a LAN cable is not connected, or the EcoWebServerIII is not powered on, the message on the right will appear.
Click the [No] button, and then check the IP address of the EcoWebServerIII, the LAN cable connection, etc., and the power.



[Yes] button : Executes the operation check of the next output destination.
[Cancel] button : Executes the operation check of the next output destination.
However, error message does not appear even if error occurs.

(5) After the operation check on every registered output destination is completed, the completion message appears.
Click the [OK] button to back to the [Confirm contact output] dialog box.

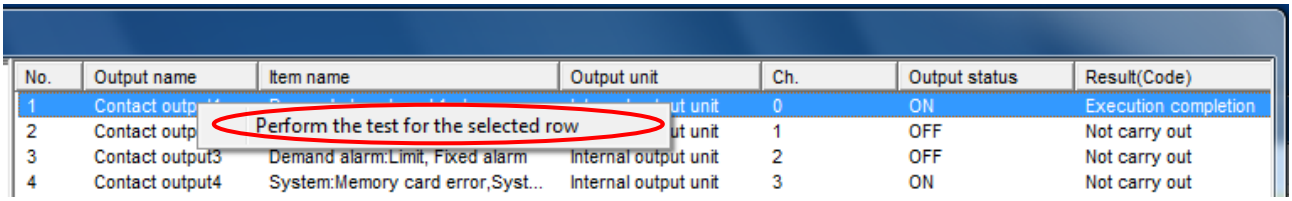


3 Testing a selected destination

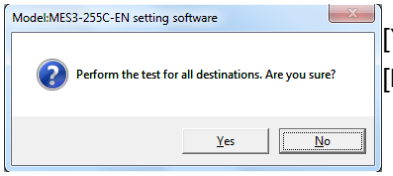
(1) Type in the maintenance password.

(The default maintenance password is “ecopass”.)

(2) Select the line of the output destination to confirm, and click the right-click menu of the [Perform the test for the selected row].

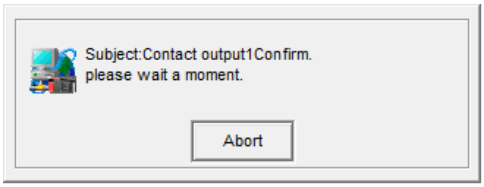


(3) An execution confirmation message appears. Click [Yes] to execute the test.

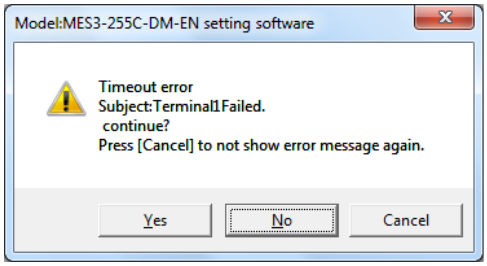


[Yes] button : Executes the contact output operation check.
[No] button : Cancels the contact output operation check, and back to the [Contact output operation check] dialog box.

(4) A dialog box that indicates the contact output operation check is in progress will appear.
If you want to cancel it, click the [Abort] button.

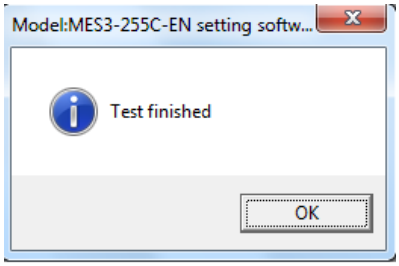


* If the IP address of the EcoWebServerIII main unit is not correct, a LAN cable is not connected, or the EcoWebServerIII is not powered on, the message on the right will appear.
Click the [No] button, and then check the IP address of the EcoWebServerIII, the LAN cable connection, etc., and the power.



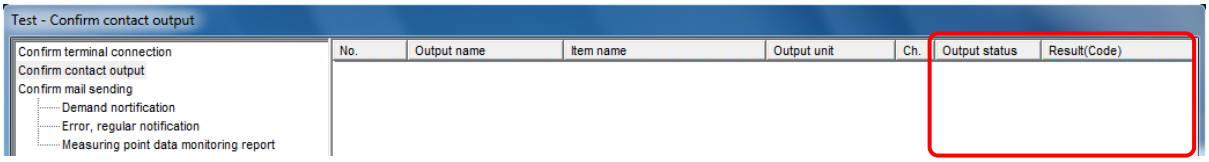
[Yes] button : Executes the operation check of next output destination.
[Cancel] button : Executes the operation check of next output destination.
However, error message does not appear even if error occurs.

(5) After the operation check on all selected output destination is completed, the completion message appears.
Click the [OK] button to back to the [Confirm contact output] dialog box.



4 Checking the results of execution

The results of the operation confirmation are displayed in the Output status and Result (code) columns on the [Confirm contact output] dialog box.



The results of execution are showed as below:

Contact status	:	Displays OFF and ON.
Results (code)	:	“Execution completion”, “Fail”, “Communication error”, “Timeout error”, “Connection error”

* If the execution results are not [Execution completion], investigate the cause based on the error code provided, and then review the registration information of the terminal or check the installation condition of the terminal again.

Remarks

- The contact output operation check execute tests by retrieving the latest contact output status, and changing to OFF if ON, and ON if OFF.
- Contact output of the following have been set in the monitoring notification registration must be checked.

  Upper/lower limit monitoring, Operating status monitoring, Specific consumption target value monitoring, and Energy plan value monitoring.

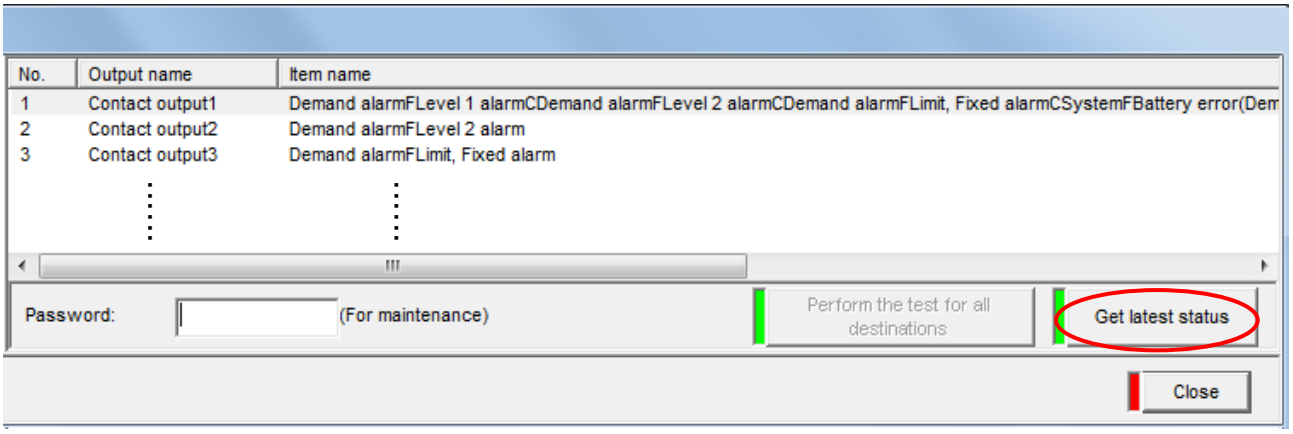
  (Refer to [Registering new contact outputs -> Selecting the contact output conditions -> (2)Selecting the detail item <Monitoring:Limit, Monitoring:Status, Monitoring:Sp-Cons., Monitoring:Energy>

Retrieving the latest contact output status

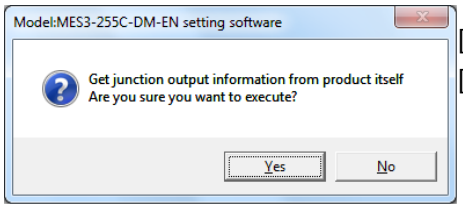
The latest contact output status is retrieved from the EcoWebServerIII and displayed.

1 Retrieving latest contact output status

(1) Click the [Get latest status] button on the [Confirm contact output] dialog box.

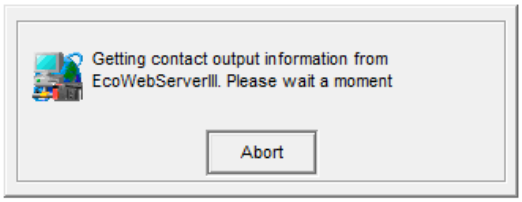


(2) An execution confirmation message appears. Click [Yes] to execute the retrieval.

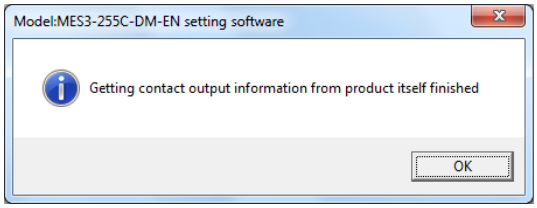


[Yes] button : Executes the contact output status retrieval process.
[No] button : Cancels the contact output status retrieval, and back to the [Contact output operation check] dialog box.

(3) A dialog box that indicates the contact output status retrieval process is in progress will appear.
If you want to cancel it, click the [Abort] button.



(4) After the retrieval on all contact output status is completed, the completion message appears.
Click the [OK] button to back to the [Confirm contact output] dialog box.



4.9.3. Demand notification (only models with demand control function)

This section explains the operation procedures in the dialog box of [Demand notification].

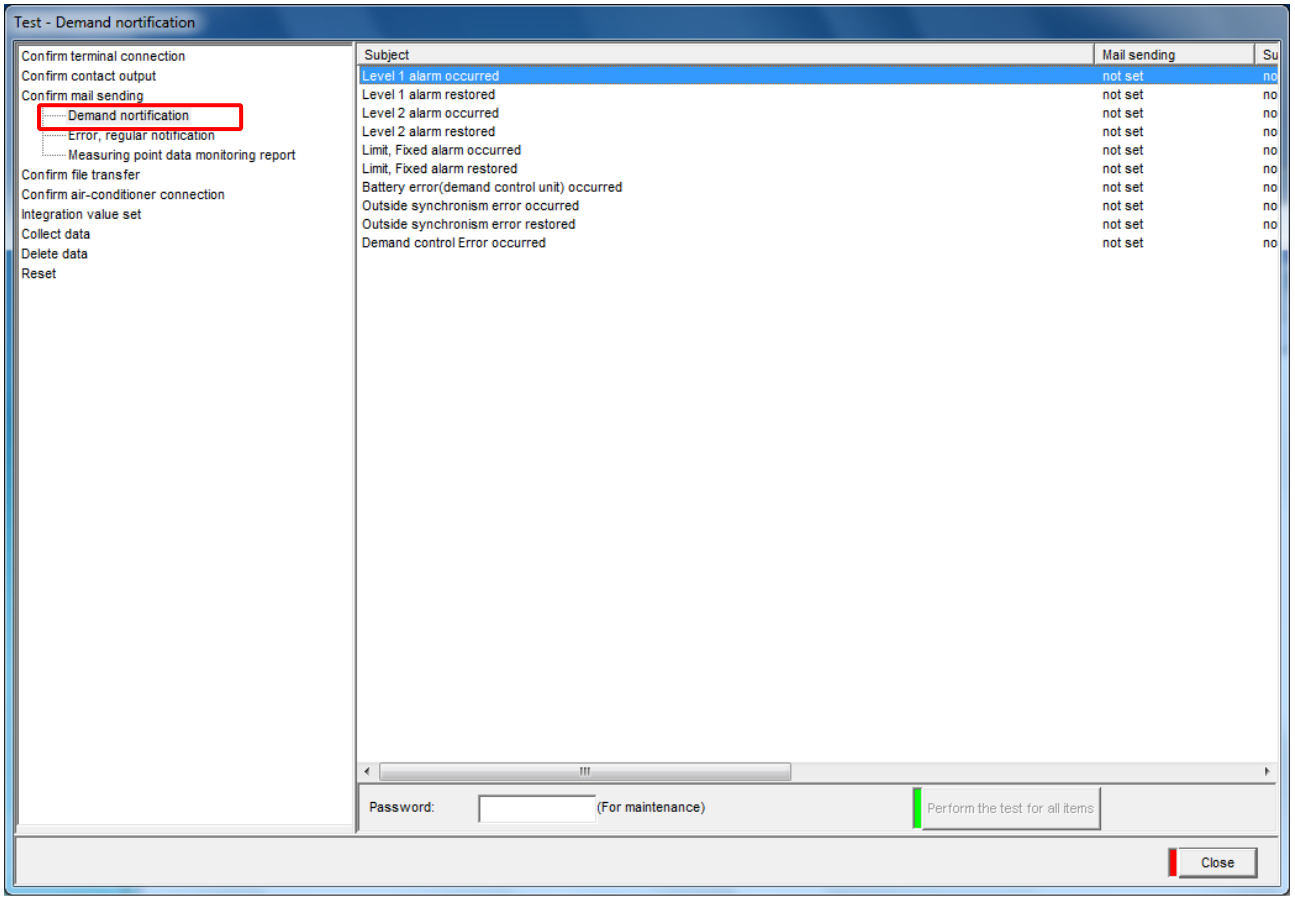
*** The Demand control and notification check is available only for the EcoWebServerIII with demand control function.**

Confirming the demand control and notification operation

This section explains the procedure to confirm mail transfer for the demand control and notification.

1 Displaying the [Demand notification] dialog box

Click [Demand notification] in the tree menu on the [Test] dialog box.

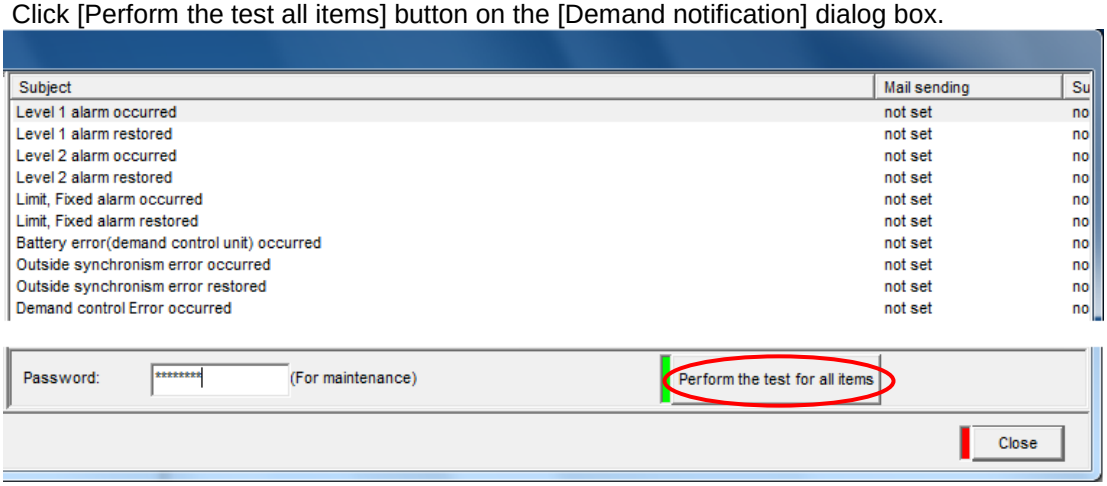


2 Testing all items

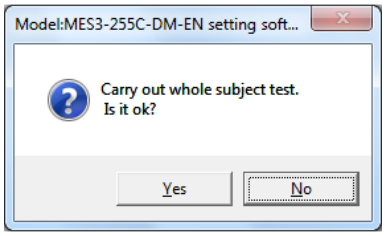
(1) Type in the maintenance password.

(The default maintenance password is “ecopass”.)

(2) Click [Perform the test all items] button on the [Demand notification] dialog box.

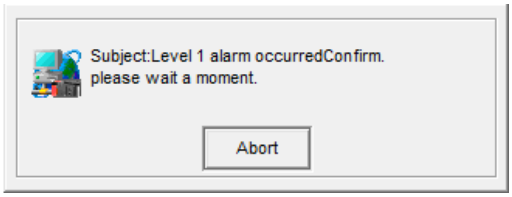


(3) An execution confirmation message appears. Click [Yes] to execute the test.



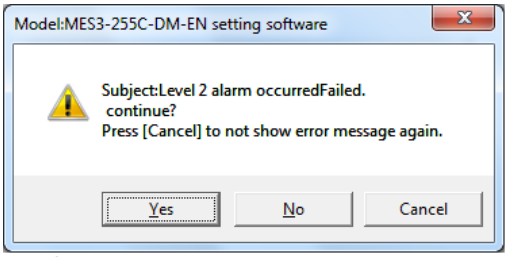
[Yes] button : Executes the demand control and notification check.
[No] button : Cancels the demand control and notification check, and back to the [Demand notification] dialog box.

(4) A dialog box that indicates the demand control and notification check is in progress will appear.
If you want to cancel it, click the [Abort] button.



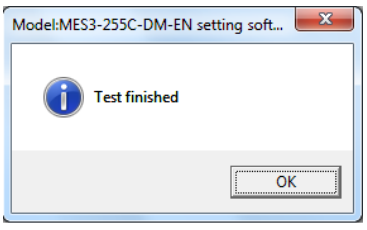
* If the demand control and notification check fails, the message on the right will appear.

Click the [No] button and check the SMTP server connection settings, and the LAN cable connection, etc.



[Yes] button : Executes the notification check of the next item.
[Cancel] button : Executes the notification check of the next item.
However, error message does not appear even if error occurs.

(5) After the notification check on every registered item is completed, the completion message appears.
Click the [OK] button to back to the [Demand notification] dialog box.

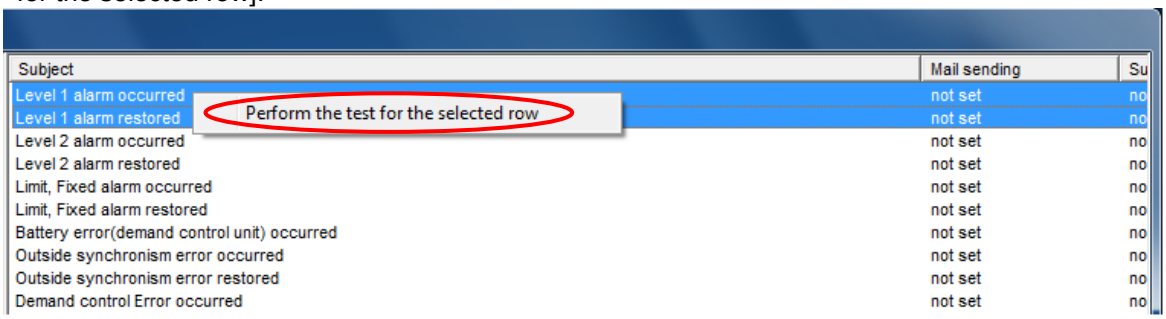


3 Testing a selected item

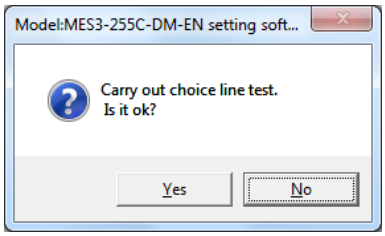
(1) Type in the maintenance password.

(The default maintenance password is “ecopass”.)

(2) Select the line of the output destination to confirm, and click the right-click menu of the [Perform the test for the selected row].



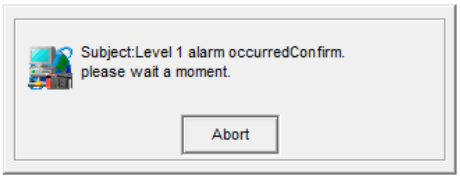
(3) An execution confirmation message appears. Click [Yes] to execute the test.



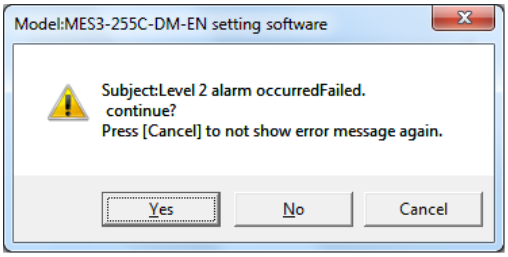
[Yes] button : Executes the demand control and notification check.

[No] button : Cancels the demand control and notification check, and back to the [Demand notification] dialog box.

(4) A dialog box that indicates the demand control and notification check is in progress will appear.
If you want to cancel it, click the [Abort] button.



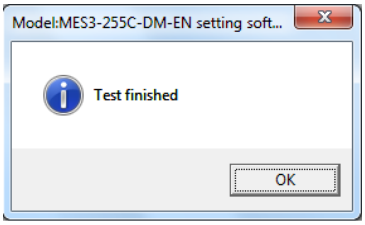
* If the Demand control and notification check fails, the message on the right will appear.
Click the [No] button and check the SMTP server connection settings, and the LAN cable connection, etc.



[Yes] button : Executes the notification check of the next item.

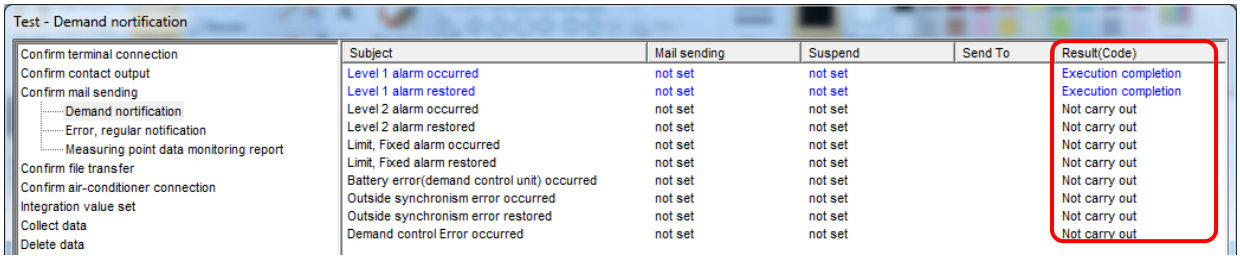
[Cancel] button : Executes the notification check of the next item.
However, error message does not appear even if error occurs.

(5) After the notification check on all selected item is completed, the completion message appears.
Click the [OK] button to back to the [Demand notification] dialog box.



4 Checking the results of execution

The results of the operation confirmation are displayed in the Result (code) column on the [Demand notification] dialog box.


Test - Demand nortification
Confirm terminal connection
Confirm contact output
Confirm mail sending
Demand nortification
Error, regular notification
Measuring point data monitoring report
Confirm file transfer
Confirm air-conditioner connection
Integration value set
Collect data
Delete data
Subject
Mail sending
Suspend
Send To
Result(Code)
Level 1 alarm occurred not set not set Execution completion
Level 1 alarm restored not set not set Execution completion
Level 2 alarm occurred not set not set Not carry out
Level 2 alarm restored not set not set Not carry out
Limit, Fixed alarm occurred not set not set Not carry out
Limit, Fixed alarm restored not set not set Not carry out
Battery error(demand control unit) occurred not set not set Not carry out
Outside synchronism error occurred not set not set Not carry out
Outside synchronism error restored not set not set Not carry out
Demand control Error occurred not set not set Not carry out

The results of execution are showed as below:

- When each item's test mail transfer ends normally
  Result (code) : Execution completion
- When each item's test mail transfer fails
  Result (code) : Fail(error code)

Remarks

- If completed, check the contents of the sent mail. The following information is sent in the test mail.

Item	Contents
From:	Send source address: Own mail address set in “Mail notification setting SMTP server setting”
To:	Send destination address: Send destination address set in “Mail notification setting Demand notification”
Subject:	Mail subject: Subject set in “Mail notification setting Demand notification” “TEST:” is always inserted before the subject to indicate a test mail.
Body:	Mail text: Text set in “Mail notification setting Demand notification”

4.9.4. Error, regular notification check

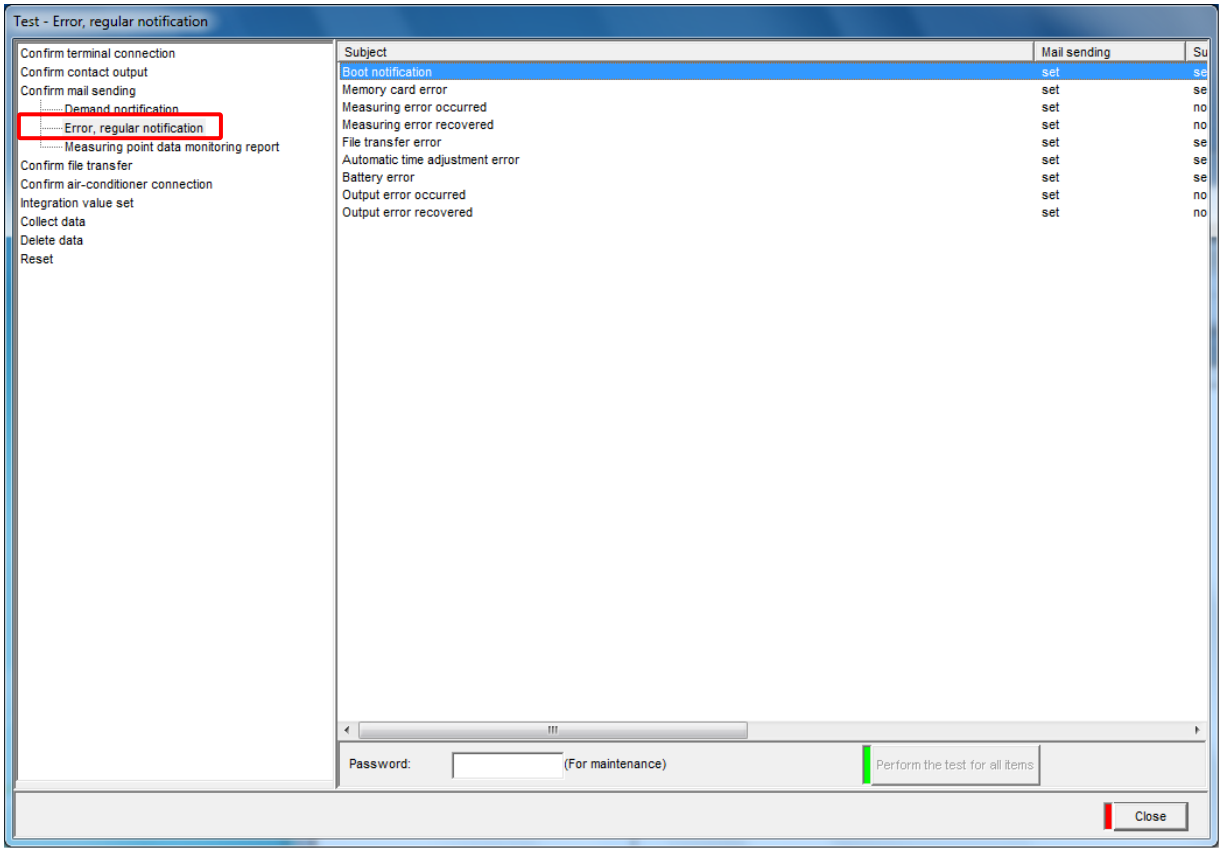
This section explains the operation procedures in the dialog box of [Error, regular notification].

Confirming the error, regular notification operation

This section describes the procedures for confirming the error, regular report mail transfer.

1 Displaying the [Error, regular notification] dialog box

Click [Error, regular notification] in the tree menu on the Test and Adjustment function dialog box.

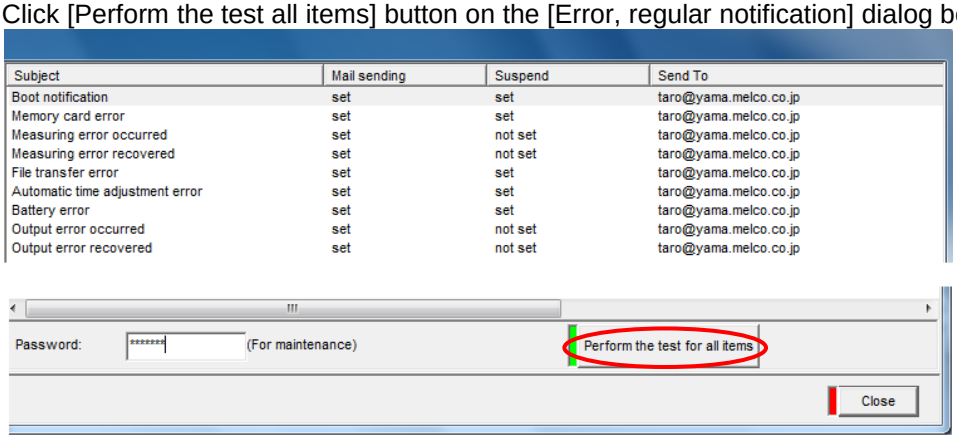


2 Testing all items

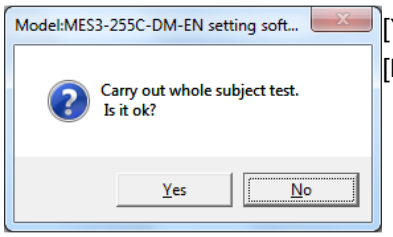
(1) Type in the maintenance password.

(The default maintenance password is “ecopass”.)

(2) Click [Perform the test all items] button on the [Error, regular notification] dialog box.

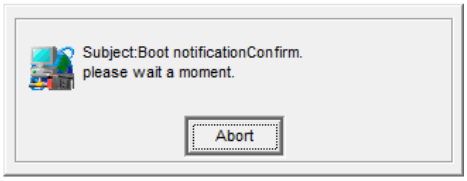

Subject
Mail sending
Suspend
Send To
Boot notification set set taro@yama.melco.co.jp
Memory card error set set taro@yama.melco.co.jp
Measuring error occurred set not set taro@yama.melco.co.jp
Measuring error recovered set not set taro@yama.melco.co.jp
File transfer error set set taro@yama.melco.co.jp
Automatic time adjustment error set set taro@yama.melco.co.jp
Battery error set set taro@yama.melco.co.jp
Output error occurred set not set taro@yama.melco.co.jp
Output error recovered set not set taro@yama.melco.co.jp
Password:
****
(For maintenance)
Perform the test for all items
Close

(3) An execution confirmation message appears. Click [Yes] to execute the test.

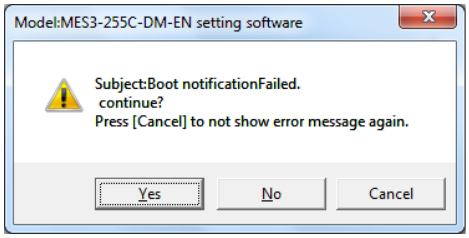


[Yes] button : Executes the error, regular notification check.
[No] button : Cancels the error, regular notification check, and back to the [Error, regular notification] dialog box.

(4) A dialog box that indicates the error, regular notification check is in progress will appear.
If you want to cancel it, click the [Abort] button.

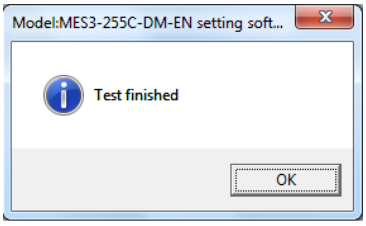


* If the error, regular notification check fails, the message on the right will appear.
Click the [No] button and check the SMTP server connection settings, and the LAN cable connection, etc.



[Yes] button : Executes the notification check of the next item.
[Cancel] button : Executes the notification check of the next item.
However, error message does not appear even if error occurs.

(5) After the notification check on every registered item is completed, the completion message appears.
Click the [OK] button to back to the [Error, regular notification] dialog box.

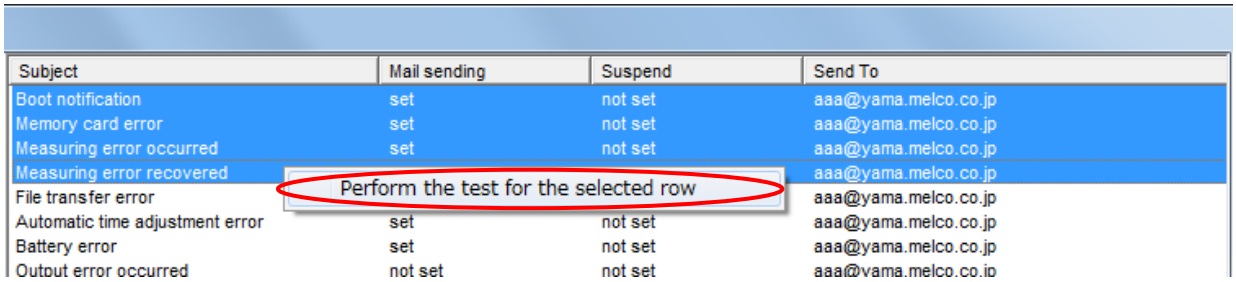


3 Testing a selected item

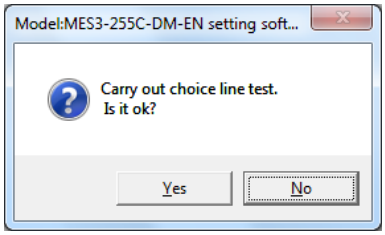
(1) Type in the maintenance password.

(The default maintenance password is “ecopass”.)

(2) Select the line of the output destination to confirm, and click the right-click menu of the [Perform the test for the selected row].

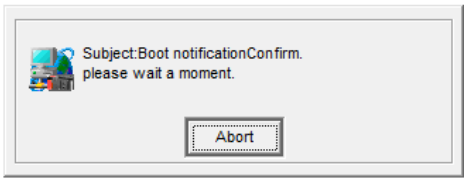


(3) An execution confirmation message appears. Click [Yes] to execute the test.

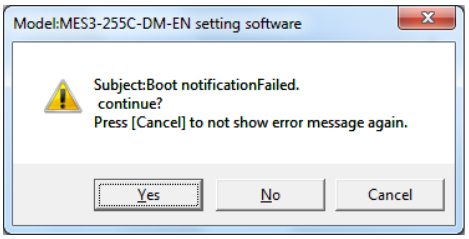


[Yes] button : Executes the error, regular notification check.
[No] button : Cancels the error, regular notification check, and back to the [Error, regular notification] dialog box.

(4) A dialog box that indicates the error, regular notification check is in progress will appear.
If you want to cancel it, click the [Abort] button.

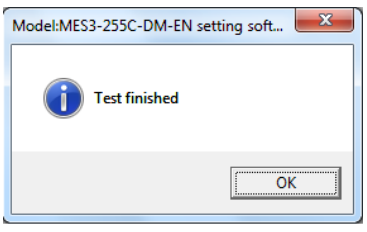


* If the error, regular notification check fails, the message on the right will appear.
Click the [No] button and check the SMTP server connection settings, and the LAN cable connection, etc.



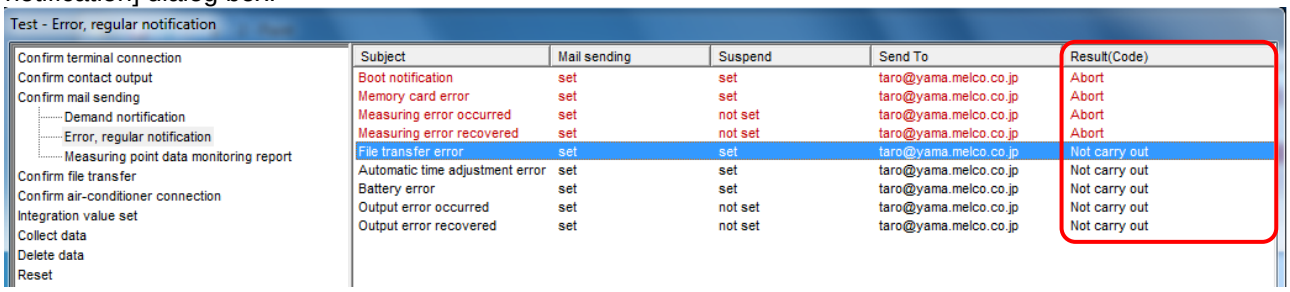
[Yes] button : Executes the notification check of the next item.
[Cancel] button : Executes the notification check of the next item.
However, error message does not appear even if error occurs.

(5) After the notification check on all selected item is completed, the completion message appears.
Click the [OK] button to back to the [Error, regular notification] dialog box.



4 Checking the results of execution

The results of the operation confirmation are displayed in the Result (code) column on the [Error, regular notification] dialog box.


Test - Error, regular notification
Confirm terminal connection
Confirm contact output
Confirm mail sending
Demand nortification
Error, regular notification
Measuring point data monitoring report
Confirm file transfer
Confirm air-conditioner connection
Integration value set
Collect data
Delete data
Reset
Subject
Mail sending
Suspend
Send To
Result(Code)
Boot notification set set taro@yama.melco.co.jp Abort
Memory card error set set taro@yama.melco.co.jp Abort
Measuring error occurred set not set taro@yama.melco.co.jp Abort
Measuring error recovered set not set taro@yama.melco.co.jp Abort
File transfer error set set taro@yama.melco.co.jp Not carry out
Automatic time adjustment error set set taro@yama.melco.co.jp Not carry out
Battery error set set taro@yama.melco.co.jp Not carry out
Output error occurred set not set taro@yama.melco.co.jp Not carry out
Output error recovered set not set taro@yama.melco.co.jp Not carry out

The results of execution are showed as below:

- When each item's test mail transfer ends normally
  Result (code) : Execution completion
- When each item's test mail transfer fails
  Result (code) : Fail(error code)

Remarks

- If completed, check the contents of the sent mail. The following information is sent in the test mail.

Item	Contents
From:	Send source address: Own mail address set in “Mail notification setting SMTP server setting”
To:	Send destination address: Send destination address set in "Mail notification setting Unit error notification, regular report"
Subject:	Mail subject: Subject set in "Mail notification setting Unit error notification, regular report" "TEST:" is always inserted before the subject to indicate a test mail.
Body:	Mail text: Text set in "Mail notification setting Unit error notification, regular report"

4.9.5. Measuring point data monitoring report check

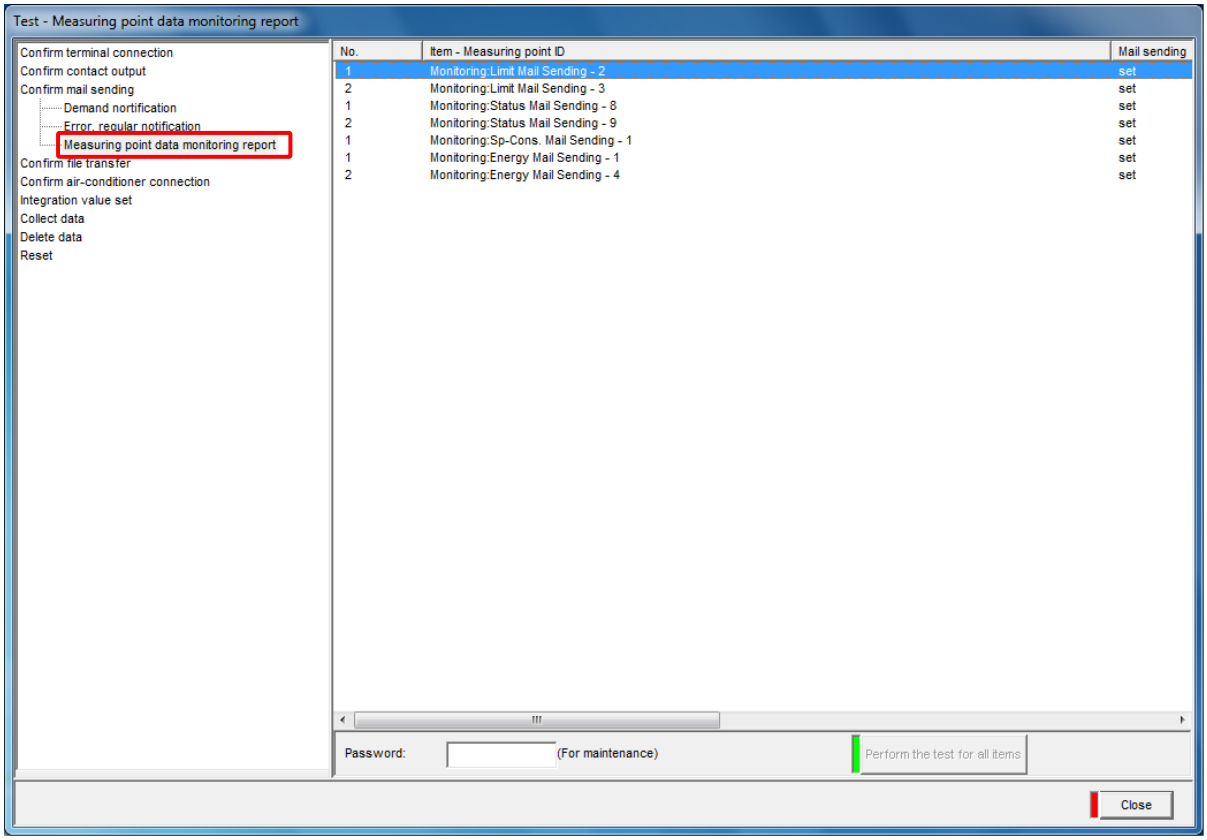
This section explains the operation procedures in the dialog box of [Measuring point data monitoring report].

Confirming the measuring point data monitoring report operation

This section explains the procedure to confirm mail transfer for the measuring point data monitoring and report.

1 Displaying the [Measuring point data monitoring report] dialog box

Click [Measuring point data monitoring report] in the tree menu on the [Test] dialog box.

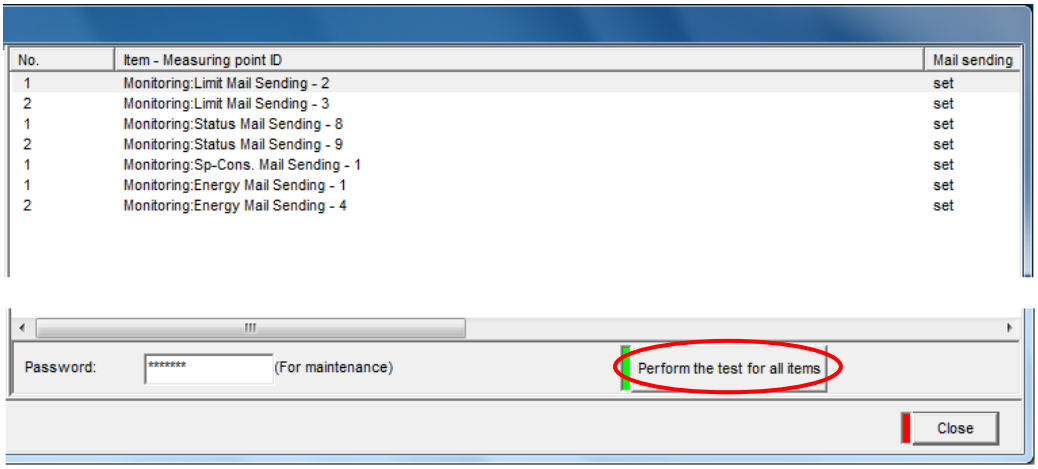

Test - Measuring point data monitoring report
Confirm terminal connection
Confirm contact output
Confirm mail sending
Demand nortification
Error, regular notification
Measuring point data monitoring report
Confirm file transfer
Confirm air-conditioner connection
Integration value set
Collect data
Delete data
Reset
No.
Item - Measuring point ID
Mail sending
1 Monitoring:Limit Mail Sending - 2 set
2 Monitoring:Limit Mail Sending - 3 set
1 Monitoring:Status Mail Sending - 8 set
2 Monitoring:Status Mail Sending - 9 set
1 Monitoring:Sp-Cons. Mail Sending - 1 set
1 Monitoring:Energy Mail Sending - 1 set
2 Monitoring:Energy Mail Sending - 4 set
Password:
(For maintenance)
Perform the test for all items
Close

2 Testing all items

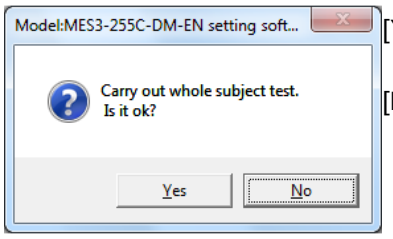
(1) Enter the maintenance password.

(The default maintenance password is “ecopass”.)

(2) Click the [Perform the test for all items] button on the [Measuring point data monitoring report] dialog box.


No.
Item - Measuring point ID
Mail sending
1 Monitoring:Limit Mail Sending - 2 set
2 Monitoring:Limit Mail Sending - 3 set
1 Monitoring:Status Mail Sending - 8 set
2 Monitoring:Status Mail Sending - 9 set
1 Monitoring:Sp-Cons. Mail Sending - 1 set
1 Monitoring:Energy Mail Sending - 1 set
2 Monitoring:Energy Mail Sending - 4 set
Password:
****
(For maintenance)
Perform the test for all items
Close

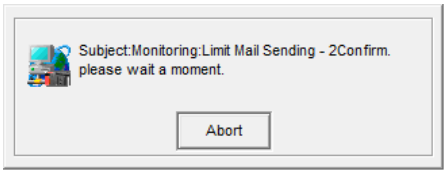
(3) An execution confirmation message appears. Click [Yes] button to execute the test.



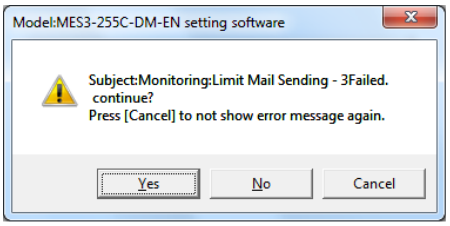
[Yes] button : Executes the measuring point data monitoring and report check.

[No] button : Cancels the measuring point data monitoring and report check, and back to the [Measuring point data monitoring report] dialog box.

(4) A dialog box that indicates the measuring point data monitoring and report check is in progress will appear.
If you want to cancel it, click the [Abort] button.

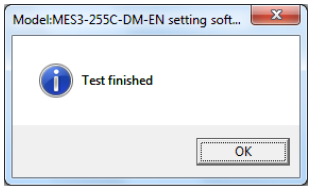


* If the measuring point data monitoring and report check fails, the message on the right will appear.
Click the [No] button and check the SMTP server connection settings, and the LAN cable connection, etc.



[Yes] button : Executes the report check of the next item.
[Cancel] button : Executes the report check of the next item.
However, error message does not appear even if error occurs.

(5) After the report check on every registered item is completed, the completion message appears.
Click the [OK] button to back to the [Measuring point data monitoring report] dialog box.

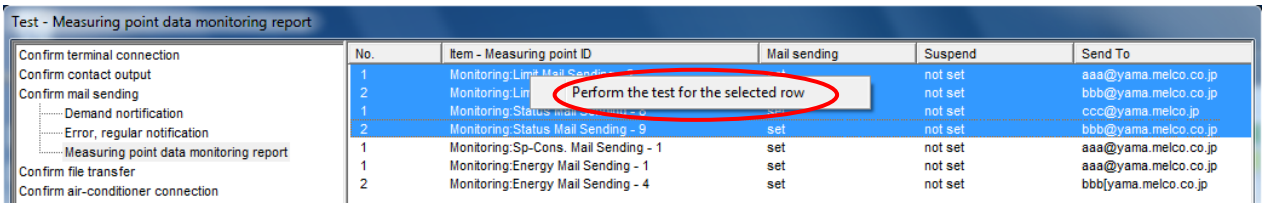


3 Testing a selected item

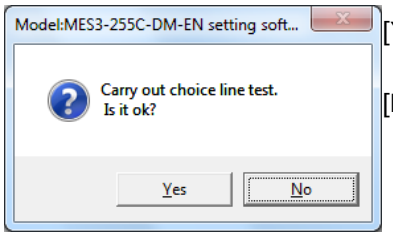
(1) Enter the maintenance password.

(The default maintenance password is “ecopass”.)

(2) Select the line of the output destination to confirm, and click the right-click menu of the [Perform the test for the selected row].


Test - Measuring point data monitoring report
Confirm terminal connection
Confirm contact output
Confirm mail sending
Demand nortification
Error, regular notification
Measuring point data monitoring report
Confirm file transfer
Confirm air-conditioner connection
No.
Item - Measuring point ID
Mail sending
Suspend
Send To
Perform the test for the selected row
1 not set aaa@yama.melco.co.jp
2 not set bbb@yama.melco.co.jp
1 not set ccc@yama.melco.jp
2 Monitoring:Status Mail Sending - 9 set not set bbb@yama.melco.co.jp
1 Monitoring:Sp-Cons. Mail Sending - 1 set not set aaa@yama.melco.co.jp
1 Monitoring:Energy Mail Sending - 1 set not set aaa@yama.melco.co.jp
2 Monitoring:Energy Mail Sending - 4 set not set bbb[yama.melco.co.jp

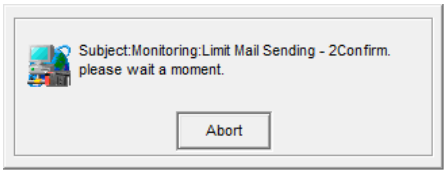
(3) An execution confirmation message appears. Click [Yes] to execute the test.



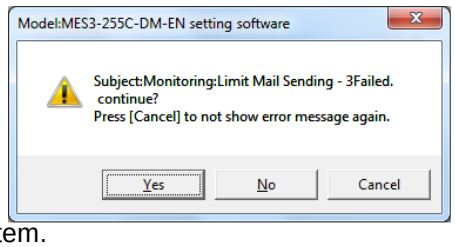
[Yes] button : Executes the measuring point data monitoring and report check.

[No] button : Cancels the measuring point data monitoring and report check, and back to the [Measuring point data monitoring report] dialog box.

(4) A dialog box that indicates the measuring point data monitoring and report check in progress will appears.
If you want to cancel it, click the [Abort] button.



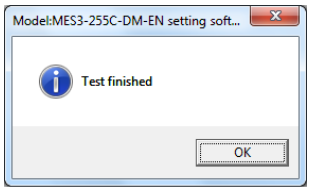
* If the measuring point data monitoring and report check fails, the message on the right will appear.
Click the [No] button and check the SMTP server connection settings, and the LAN cable connection, etc.



[Yes] button : Executes the report check of the next item.

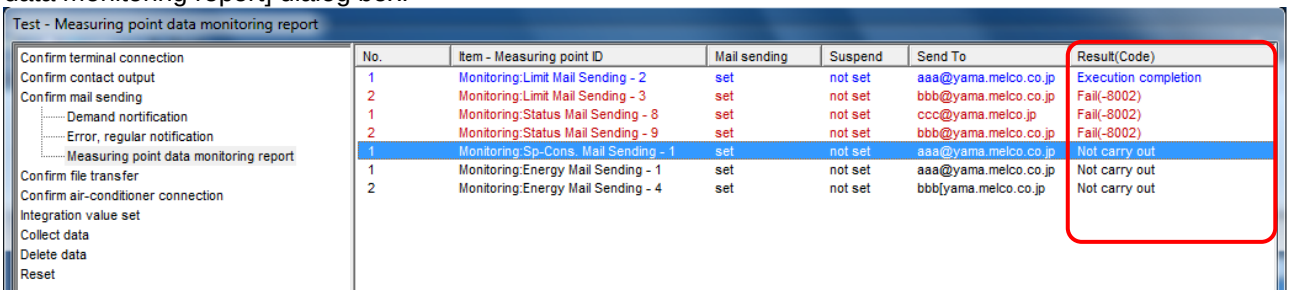
[Cancel] button : Executes the report check of the next item.
However, error message does not appear even if error occurs.

(5) After the report check on all selected item is completed, the completion message appears.
Click the [OK] button to back to the [Measuring point data monitoring report] dialog box.



4 Confirming the execution results

The results of the operation confirmation are displayed in the Result (code) column on the [Measuring point data monitoring report] dialog box.


Test - Measuring point data monitoring report
Confirm terminal connection
Confirm contact output
Confirm mail sending
Demand nortification
Error, regular notification
Measuring point data monitoring report
Confirm file transfer
Confirm air-conditioner connection
Integration value set
Collect data
Delete data
Reset
No.
Item - Measuring point ID
Mail sending
Suspend
Send To
Result(Code)
1 Monitoring:Limit Mail Sending - 2 set not set aaa@yama.melco.co.jp Execution completion
2 Monitoring:Limit Mail Sending - 3 set not set bbb@yama.melco.co.jp Fail(-8002)
1 Monitoring:Status Mail Sending - 8 set not set ccc@yama.melco.jp Fail(-8002)
2 Monitoring:Status Mail Sending - 9 set not set bbb@yama.melco.co.jp Fail(-8002)
1 Monitoring:Sp-Cons. Mail Sending - 1 set not set aaa@yama.melco.co.jp Not carry out
1 Monitoring:Energy Mail Sending - 1 set not set aaa@yama.melco.co.jp Not carry out
2 Monitoring:Energy Mail Sending - 4 set not set bbb[yama.melco.co.jp Not carry out

The results of execution are showed as below:

- When each item's test mail transfer ends normally
  Result (code) : Execution completion
- When each item's test mail transfer fails
  Result (code) : Fail (error code)

Remarks

- If completed, check the contents of the sent mail. The following information is sent in the test mail.

Item	Contents
From:	Send source address: Own mail address set in “Mail report setting SMTP server setting”
To:	Send destination address: Send destination address set in "Mail report setting Upper/lower limit monitoring and report, Operation status monitoring and report, Specific consumption target value monitoring and report, Energy plan value monitoring and report".
Subject:	Mail subject: Subject set in Mail report setting Upper/lower limit monitoring and report, Operation status monitoring and report, Specific consumption target value monitoring and report, Energy plan value monitoring and report”. "TEST:" is always inserted before the subject to indicate a test mail.
Body:	Mail text: Text set in Mail report setting "Mail report setting Upper/lower limit monitoring and report, Operation status monitoring and report, Specific consumption target value monitoring and report, Energy plan value monitoring and report ".

4.9.6. File automatic transfer check

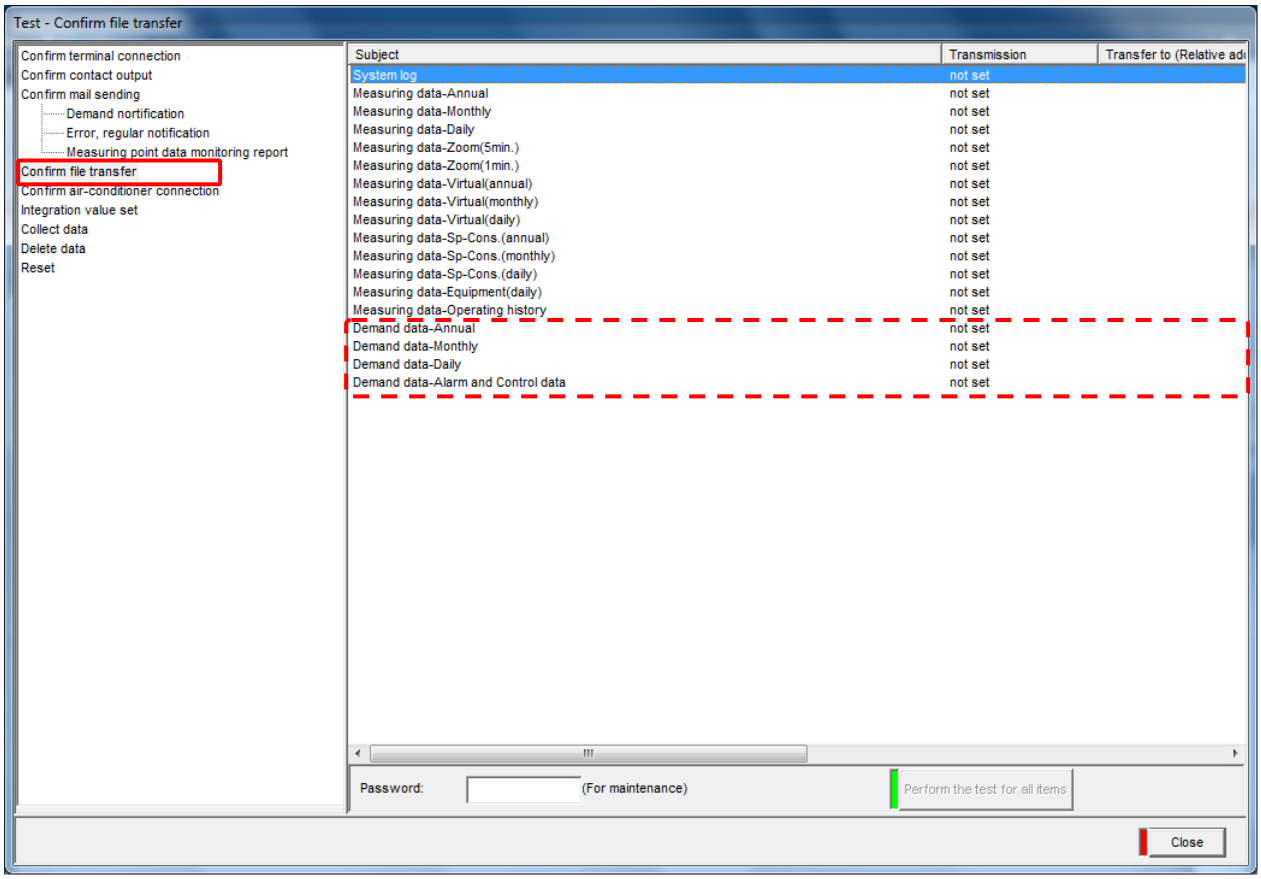
This section explains the operation procedures in the dialog box of [Confirm file transfer].

Confirming the file automatic transfer operation

This section explains the procedures to confirm the file automatic transfer.

1 Displaying the [Confirm file transfer] dialog box

Click [Confirm file transfer] in the tree menu on the [Test] dialog box.



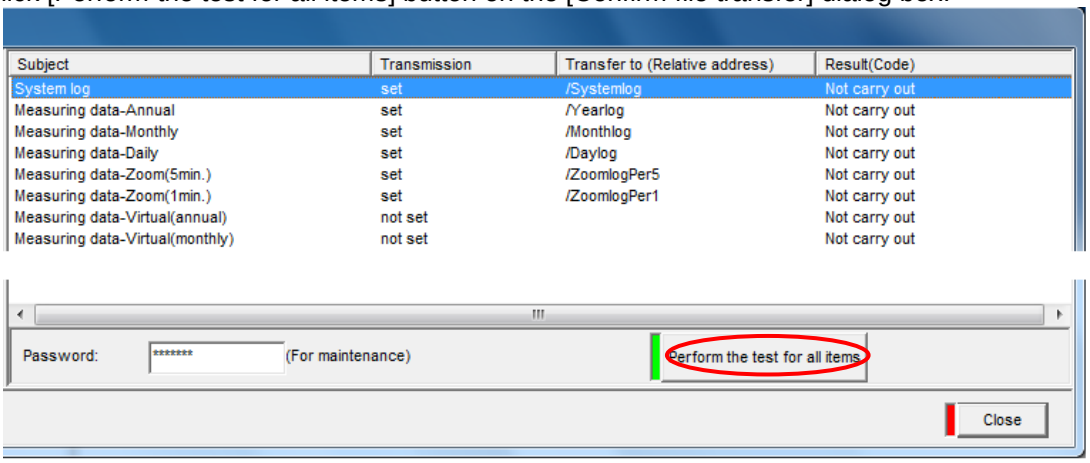
* **The demand data is not displayed if the EcoWebServerIII does not have the demand control function.**

2 Testing all items

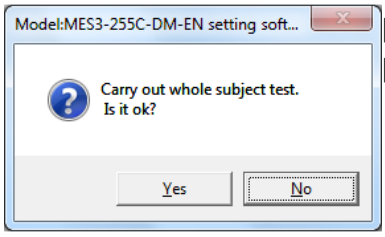
(1) Type in the maintenance password.

(The default maintenance password is “ecopass”.)

(2) Click [Perform the test for all items] button on the [Confirm file transfer] dialog box.

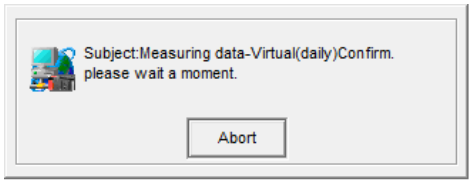


(3) An execution confirmation message appears. Click [Yes] to execute the test.

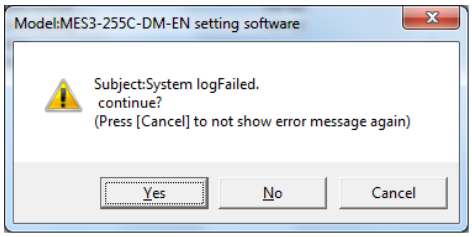


[Yes] button : Executes the file automatic transfer check.
[No] button : Cancels the file automatic transfer check, and back to the [Confirm file transfer] dialog box.

(4) A dialog box that indicates the file automatic transfer check is in progress will appear.
If you want to cancel it, click the [Abort] button.

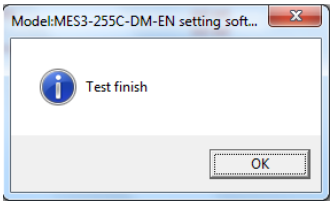


* If the file automatic transfer check fails, the message on the right will appear.
Click the [No] button and check the FTP server connection settings, and the LAN cable connection, etc.



[Yes] button : Executes the transfer check of the next item.
[Cancel] button : Executes the transfer check of the next item.
However, error message does not appear even if error occurs.

(5) After the automatic transfer check on every registered item is completed, the completion message appears.
Click the [OK] button to return to the [Confirm file transfer] dialog box.

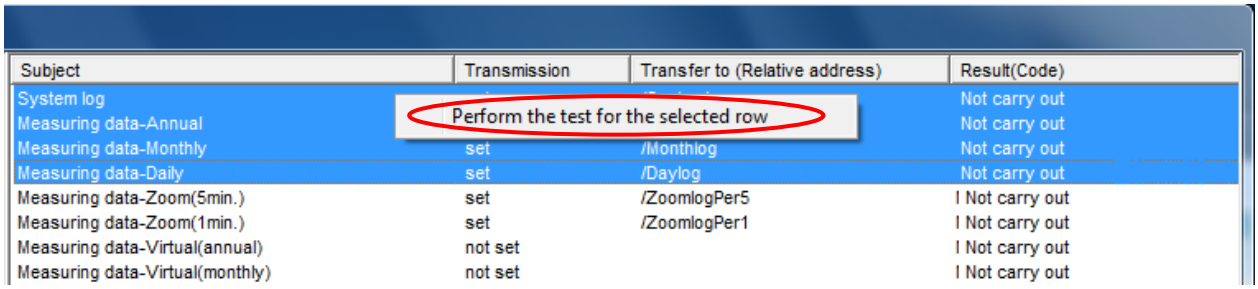


3 Testing a selected item

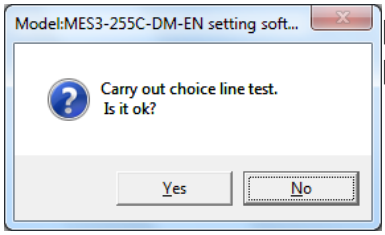
(1) Type in the maintenance password.

(The default maintenance password is “ecopass”.)

(2) Select the line of the output destination to confirm, and click the right-click menu of the [Perform the test for the selected row].

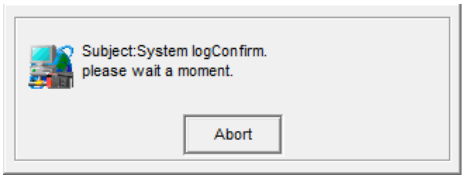


(3) An execution confirmation message appears. Click [Yes] to execute the test.

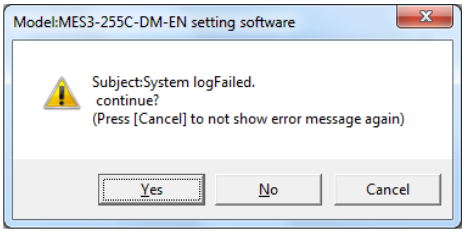


[Yes] button : Executes the file automatic transfer check.
[No] button : Cancels the file automatic transfer check, and back to the [Confirm file transfer] dialog box.

(4) A dialog box that indicates the file automatic transfer check is in progress will appear.
If you want to cancel it, click the [Abort] button.

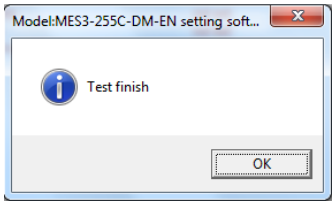


* If the file automatic transfer check fails, the message on the right will appear.
Click the [No] button and check the FTP server connection settings, and the LAN cable connection, etc.



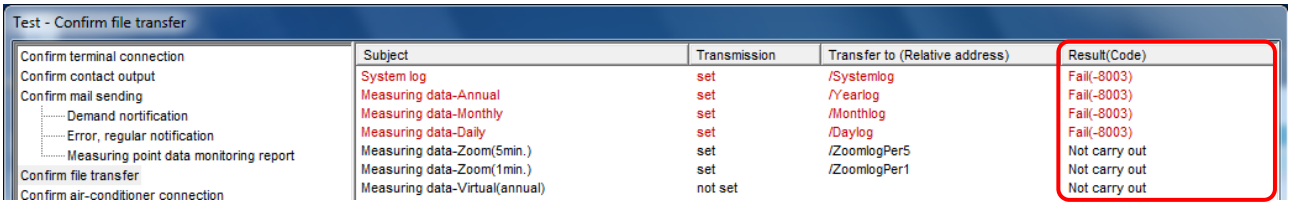
[Yes] button : Executes the transfer check of the next item.
[Cancel] button : Executes the transfer check of the next item.
However, error message does not appear even if error occurs.

(5) After the automatic transfer check on all selected item is completed, the completion message appears.
Click the [OK] button to return to the [Confirm file transfer] dialog box.



4 Confirming the execution results

The results of the operation confirmation are displayed in the Execution results (code) column on the [Confirm file transfer] dialog box.



The results of execution are showed as below:

- When each item's test mail transfer ends normally
  Result (code) : Succeed
- When each item's test mail transfer fails
  Result (code) : Fail (error code)

Remarks

- If successful, check the FTP server's transfer destination folder. The contents of the transferred file are listed below.

Item		Contents
Annual data	TEST_y.csv	TEST, TEST
Monthly data	TEST_m.csv	
Daily data	TEST_d.csv	
Zoom (5-minute) data	TEST_z5.csv	
Zoom (1-minute) data	TEST_z1.csv	
Virtual data (annual)	TEST_v_y.csv	
Virtual data (monthly)	TEST_v_m.csv	
Virtual data (daily)	TEST_v_d.csv	
Specific consumption data (annual)	TEST_b_y.csv	
Specific consumption data (monthly)	TEST_b_m.csv	
Specific consumption data (daily)	TEST_b_d.csv	
Equipment data (daily)	TEST_f_d.csv	
Operation history data	TEST_di.csv	
System log	TEST_s.csv	
Demand data (annual)	TEST_d_y.csv	
Demand data (monthly)	TEST_d_m.csv	
Demand data (daily)	TEST_d_d.csv	
Demand alarm and control history data	TEST_a.csv	

* Do not test at the timing of [file transfer time] (set in [4.8.12 FTP server setting]).
  There is a possibility that the file transfer is overlap, and not transferred correctly.

4.9.7. Air-controller connection check (only models with demand control function)

This section explains the procedures for making an external transmission to the air-conditioner controller for each energy saving level.

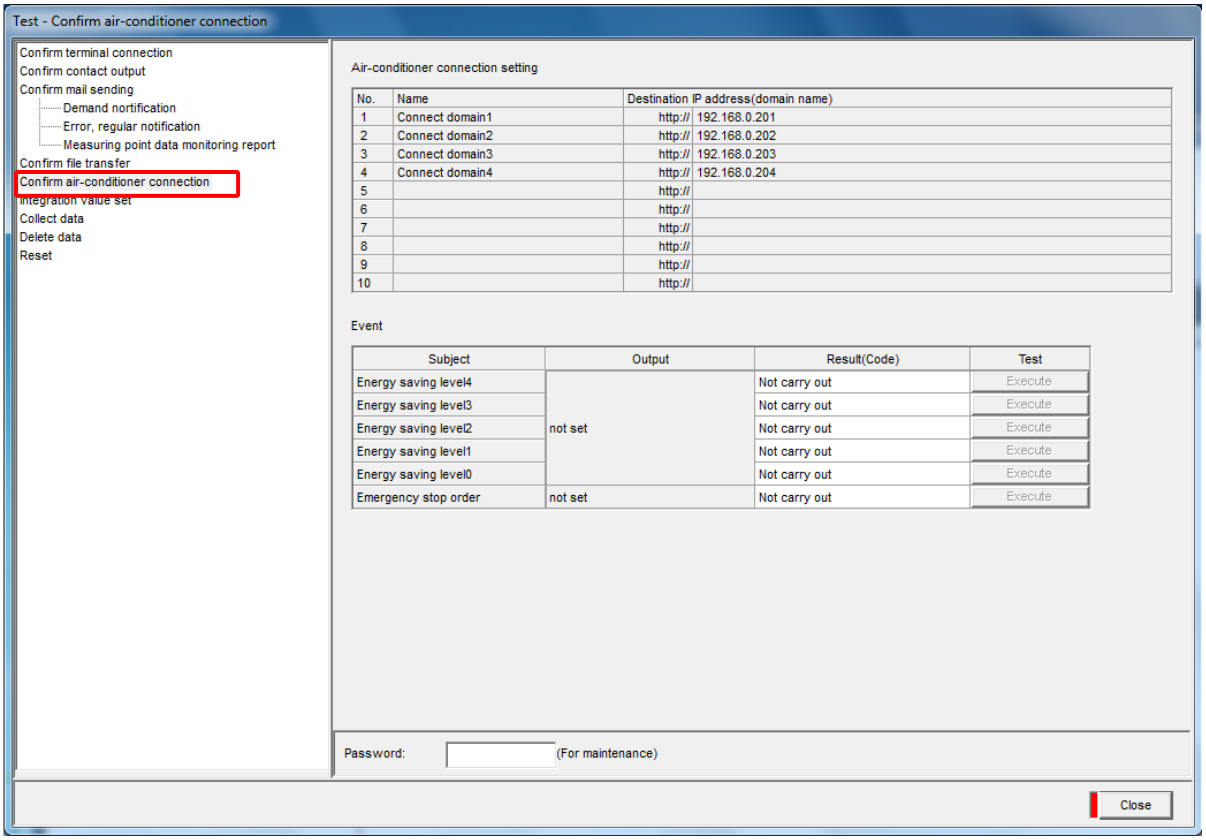
* **The Air-controller connection check is available only for the EcoWebServerIII with demand control function.**
* **This does not need to be set when not using the coordinated function with the air-conditioner.**

Confirming the connection with air-conditioner controller

This section explains the procedure to confirm the connection with the air-conditioner controller.

1 Displaying the [Confirm air-conditioner connection] dialog box

Click [Confirm air-conditioner connection] in the tree menu on the [Test] dialog box.

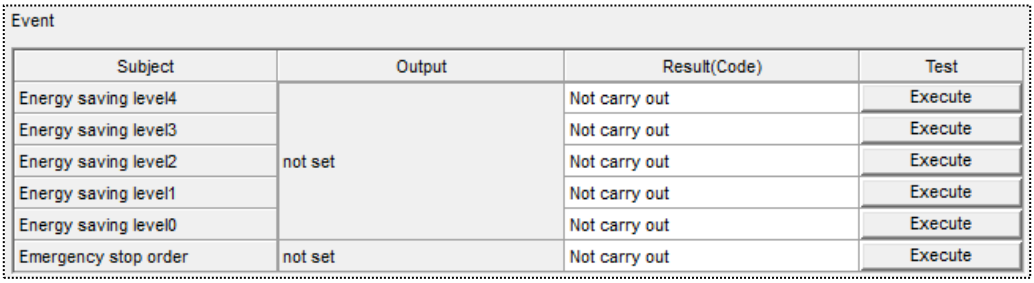


2 Testing the external transmission

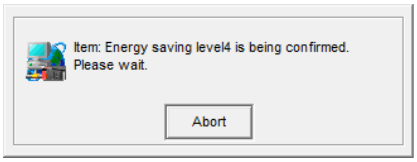
(1) Type in the maintenance password.

(The default maintenance password is “ecopass”.)

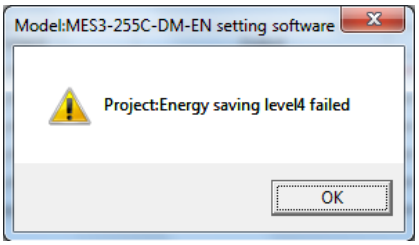
(2) Click the [Execute] button for items to send.



(3) A dialog box that indicates the air-controller connection check is in progress will appear.
If you want to cancel it, click the [Abort] button.

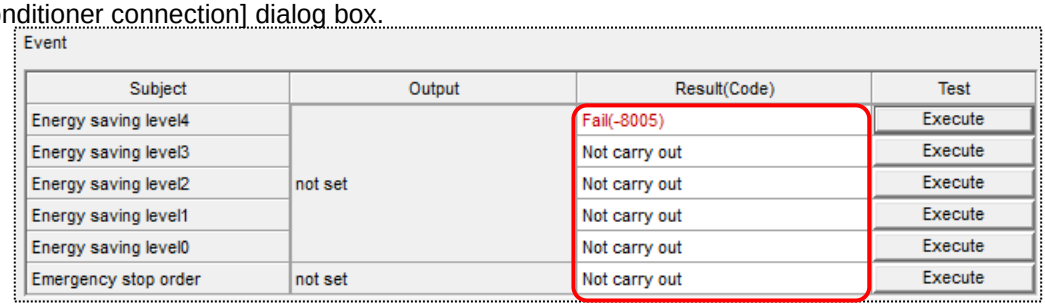


* If external transmission fails, the message on the right will appear.
Click the [OK] button and check the air-controller connection settings, and the LAN cable connection, etc.



3 Confirming the execution results

The results of the operation confirmation are displayed in the Execution results column on the [Confirm air-conditioner connection] dialog box.



The results of execution are showed as below:

- When external transmission ends normally : Succeed
- When external transmission fails : Fail(error code)

*** The transmitted file is a test file for confirming the operation.**

4.9.8. Integrated count value settings (only models with demand control function)

This section explains the integrated count value settings.

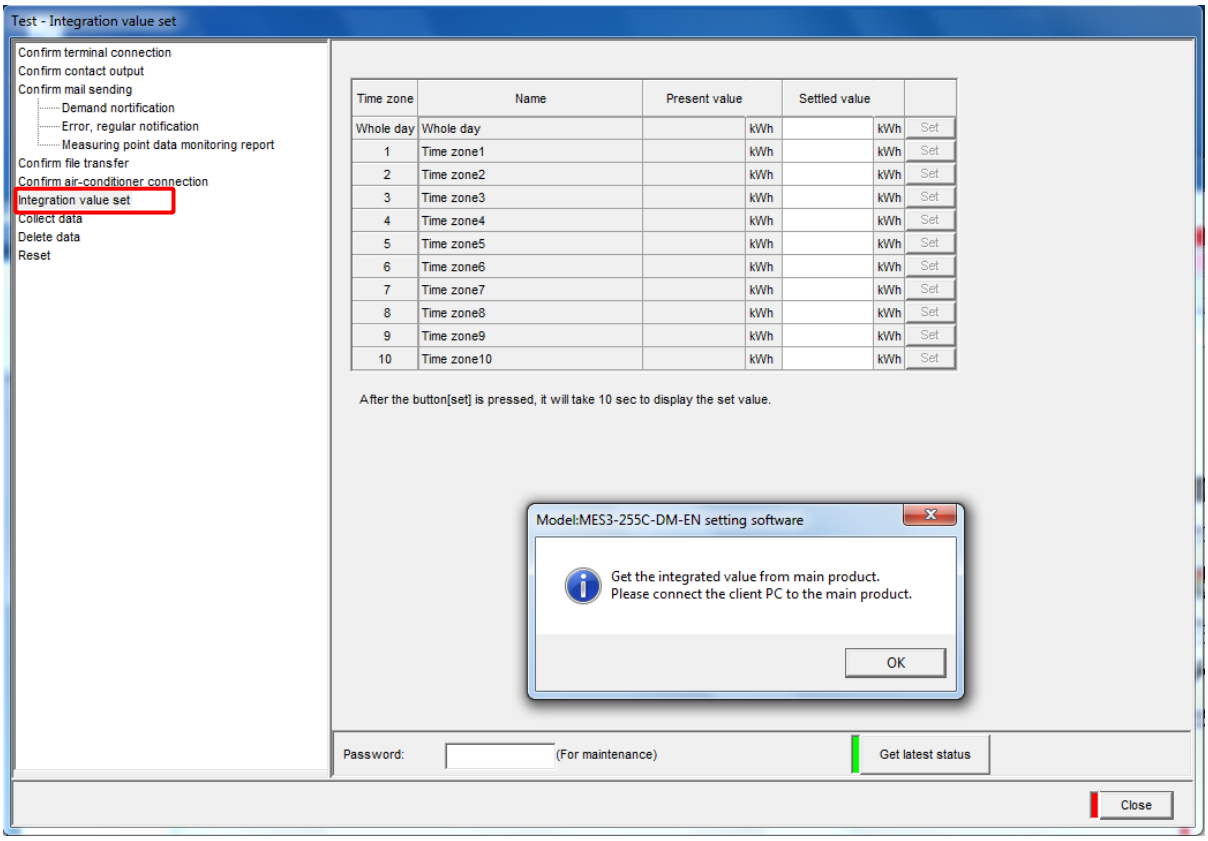
* **The integrated count value setting is available only for the EcoWebServerIII with demand control function.**
* **Do not set an integrated value just before or after the hour or half hour). If the integrated value is changed during operation, an abnormally large value may be displayed for the electric energy (30-minute rate, daily rate, monthly rate).**

Setting the integrated count value

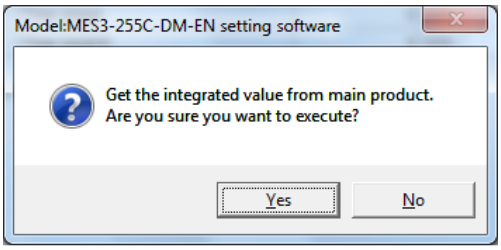
This section explains the procedures to set the electric energy for each time zone.

1 Displaying the [Integration value set] screen

(1) Click [Integration value set] in the tree menu on the [Test] dialog box.
The following confirmation message will appear. Click [OK] after checking the connection with the EcoWebServerIII.



(2) After the integrated count value information has been retrieved from the EcoWebServerIII, a completion message appears.
Click the [OK] button.



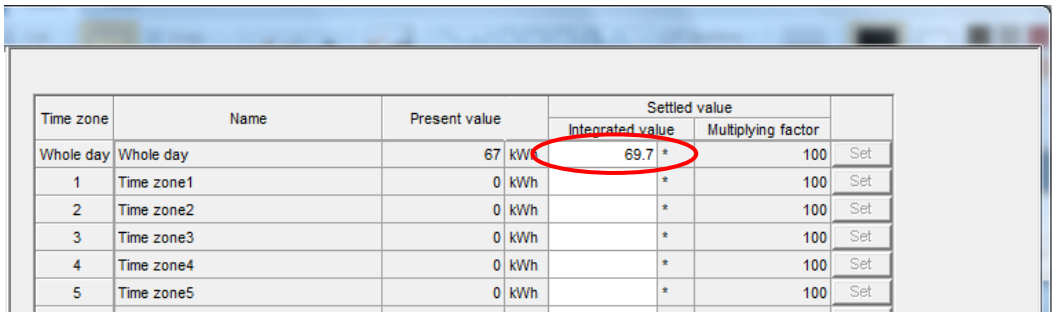
The retrieved integrated count value information is displayed in the “Present value” field.

2 Setting the electric energy

(1) Type in the maintenance password.

(The default maintenance password is “ecopass”.)

(2) Enter the electric energy meter's indication value in the [Indicated value].



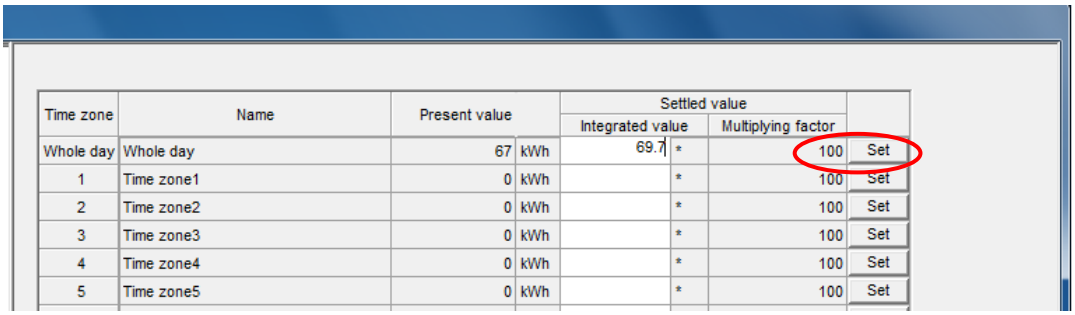
Time zone	Name	Present value		Settled value			
				Integrated value		Multiplying factor	
Whole day	Whole day	67	kWh	69.7	*	100	Set
1	Time zone1	0	kWh		*	100	Set
2	Time zone2	0	kWh		*	100	Set
3	Time zone3	0	kWh		*	100	Set
4	Time zone4	0	kWh		*	100	Set
5	Time zone5	0	kWh		*	100	Set

*1 **Enter the current indication on the electric energy meter for each time zone.**

*2 **Enter within the following range according to the number of meter digits in the demand setting.**
Effective value range = Meter multiplier × Value range of transaction meter (0 to 9999.99 or 99999.9 or 999999) = 0 to meter multiplier × (10 number of instrument digits – 10 (number of instrument digits –7))

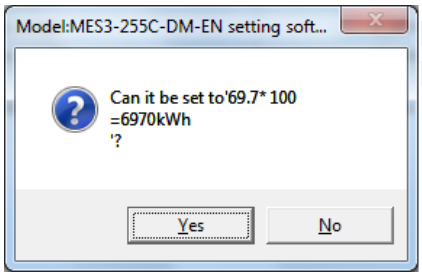
*3 **If a value exceeding the number of valid decimal digits is entered or a decimal digit is not input, the value will be rounded to the valid decimal digits.**
<Ex.: If the number of meter digits is 5 digits and 13776.25 is entered for the meter indication, the value will be 13776.2>

(3) Click [Set] for the items to set.



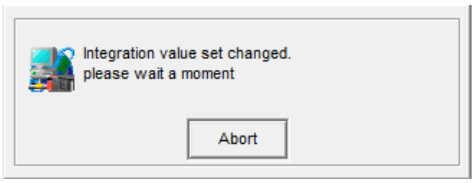
Time zone	Name	Present value		Settled value			
				Integrated value		Multiplying factor	
Whole day	Whole day	67	kWh	69.7	*	100	Set
1	Time zone1	0	kWh		*	100	Set
2	Time zone2	0	kWh		*	100	Set
3	Time zone3	0	kWh		*	100	Set
4	Time zone4	0	kWh		*	100	Set
5	Time zone5	0	kWh		*	100	Set

(4) An execution confirmation message appears. Click the [Yes] button and set the integrated count value.



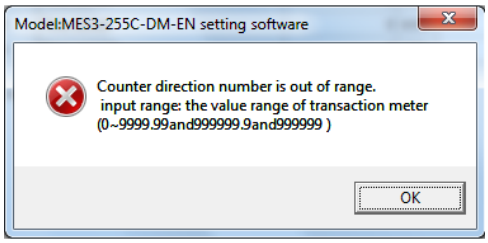
[Yes] button : Executes the integrated count value setting.
[No] button : Cancels the integrated count value setting and back to the [Integration value set] dialog box.

(5) A dialog box that indicates the integrated count value setting is in progress will appear.
If you want to cancel it, click the [Abort] button.

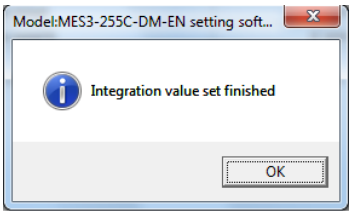


* If the settings are incorrect, the message as in the right appears according to the illegal data when the [Set] button is clicked.
Revise the settings to the conditions are satisfied.

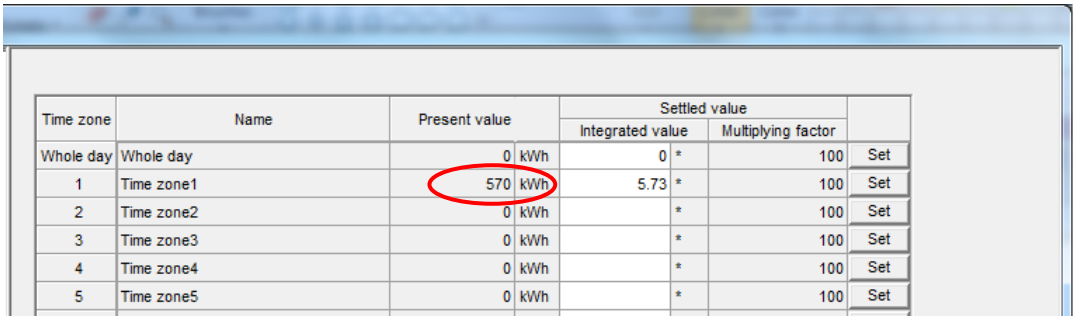
(Example of display)


Model:MES3-255C-DM-EN setting software
Counter direction number is out of range.
input range: the value range of transaction meter
(0~9999.99and999999.9and999999)
OK

(6) After the integrated count value has been set, the completion message will appear.
Click the [OK] button to back to the [Integration value set] dialog box.



(7) Check the set details.



Time zone	Name	Present value		Settled value			
				Integrated value		Multiplying factor	
Whole day	Whole day	0	kWh	0	*	100	Set
1	Time zone1	570	kWh	5.73	*	100	Set
2	Time zone2	0	kWh		*	100	Set
3	Time zone3	0	kWh		*	100	Set
4	Time zone4	0	kWh		*	100	Set
5	Time zone5	0	kWh		*	100	Set

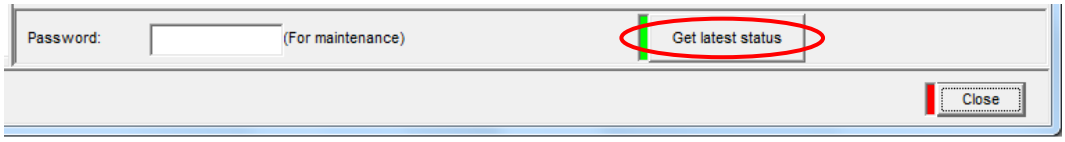
*** The latest current value for that time zone appears immediately after setting.**

Retrieving the latest integrated count value information

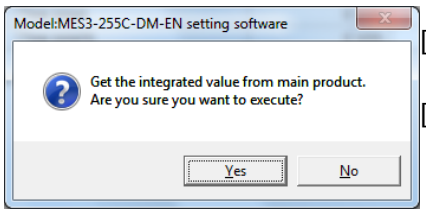
The latest integrated count value information is retrieved from the EcoWebServerIII and displayed.

1 Retrieving latest integrated count value information

(1) Click the [Get latest status] button on the [Integration value set] dialog box.



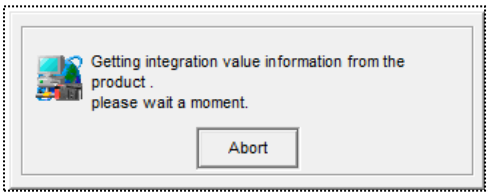
(2) An execution confirmation message appears. Click [Yes] to execute the retrieval.



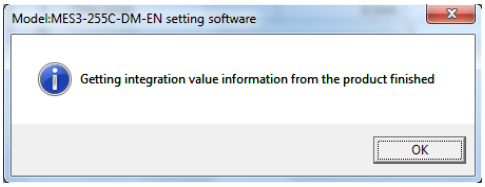
[Yes] button : Executes the integrated count value information retrieval process

[No] button : Cancels the integrated count value information retrieval, and back to [Integration value set] dialog box.

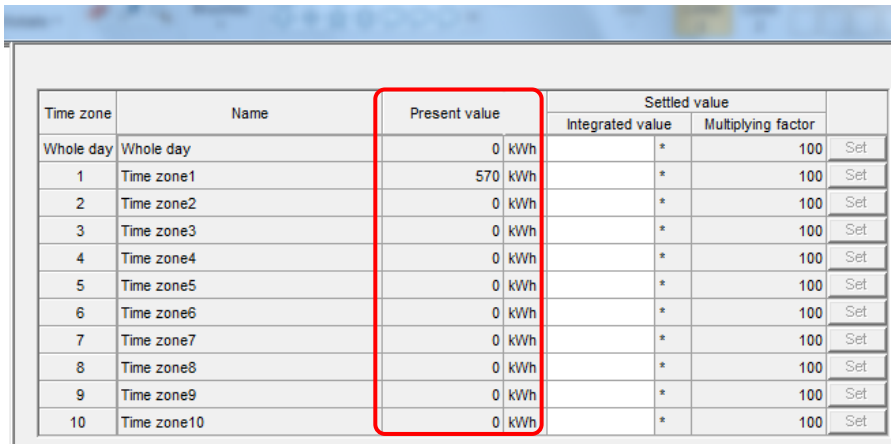
(3) A dialog box that indicates the integrated count value information retrieval is in progress will appear.
If you want to cancel it, click the [Abort] button.



(4) After the retrieval of the integrated count value information is completed, the completion message will appear.
Click the [OK] button to back to the [Integration value set] dialog box.



(5) Check the displayed information.



Time zone	Name	Present value		Settled value			
				Integrated value		Multiplying factor	
Whole day	Whole day	0	kWh		*	100	Set
1	Time zone1	570	kWh		*	100	Set
2	Time zone2	0	kWh		*	100	Set
3	Time zone3	0	kWh		*	100	Set
4	Time zone4	0	kWh		*	100	Set
5	Time zone5	0	kWh		*	100	Set
6	Time zone6	0	kWh		*	100	Set
7	Time zone7	0	kWh		*	100	Set
8	Time zone8	0	kWh		*	100	Set
9	Time zone9	0	kWh		*	100	Set
10	Time zone10	0	kWh		*	100	Set

4.9.9. Data collection

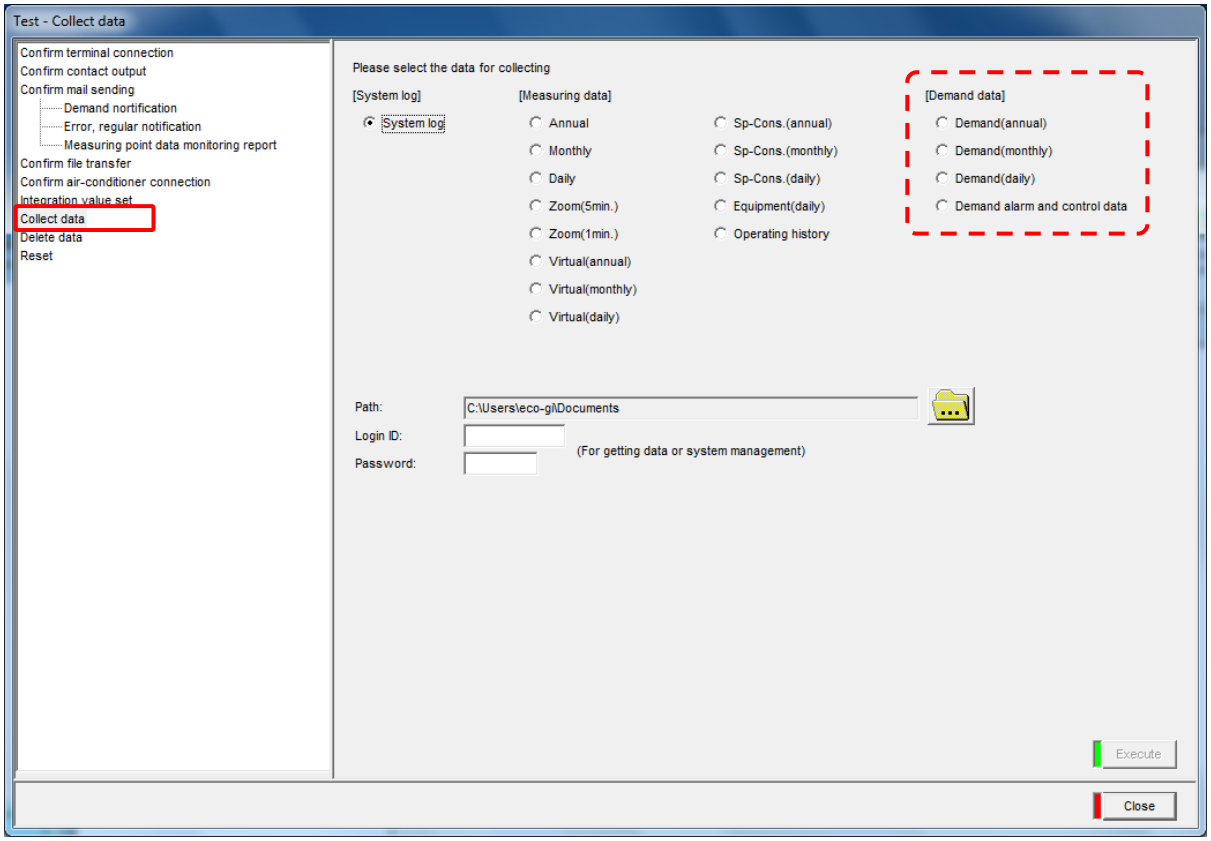
This section explains the operation procedures in the dialog box of [Collect data].

Collecting data

This section explains the procedures to manually collect data stored in EcoWebServerIII.

1 Displaying the [Collect data] dialog box

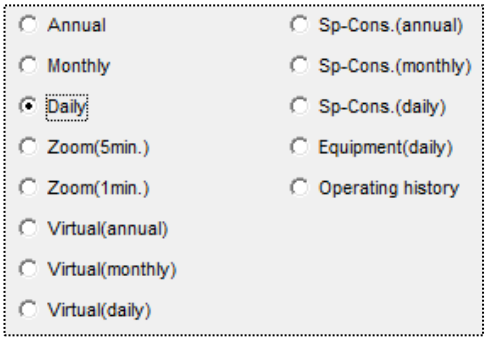
Click [Collect data] in the tree menu on the [Test] dialog box.



*** The demand data is not displayed if the EcoWebServerIII does not have the demand control function.**

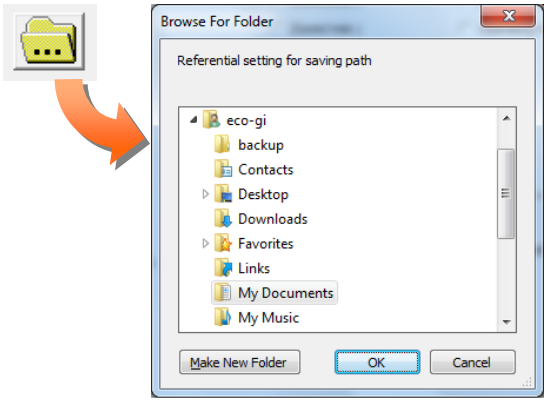
2 Selecting the data to collect

Select the data to collect by clicking the radio button [●].



* Multiple types of data cannot be collected simultaneously.

3 Specifying the destination folder



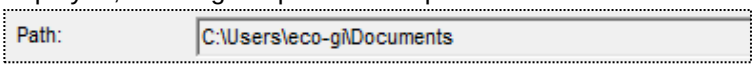
Specify the data for saving the collected data.

(1) Click the Browse button.

The [Browse For Folder] dialog box is displayed.

(2) Select the destination folder and click the button to determine.

[OK] button : Specifies the selected file as the destination. The [Collect data] dialog box will be displayed, showing the path of the specified destination location in the [Path] field.



[Cancel] button : Cancels the selection of the folder and back to the [Collect data] dialog box.
[Make New folder] button : Creates a new folder.

4 Inputting the login ID and password

Type in either the data acquisition or system administration login ID and password.

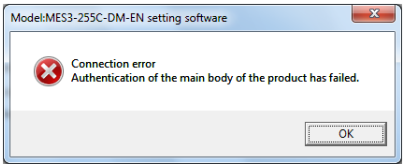
(The default data acquisition login ID and password are “guest” and “user”.)
(The default system administration login ID and password are "ecoV" and "ecopass".)

5 Collecting the files

(1) When you click [Execute] button, the [Selection of data collection] dialog box will be displayed.

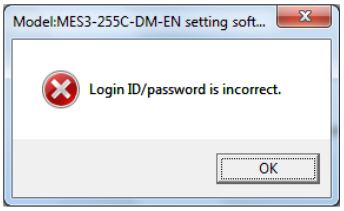
*1 If the IP address of EcoWebServerIII is incorrect, the LAN cable is not connected, or the EcoWebServerIII is not powered ON, the message on the right will appear.

Click the [OK] button, and then check the IP address of EcoWebServerIII, the connection of the LAN cable, and whether the power is turned on.



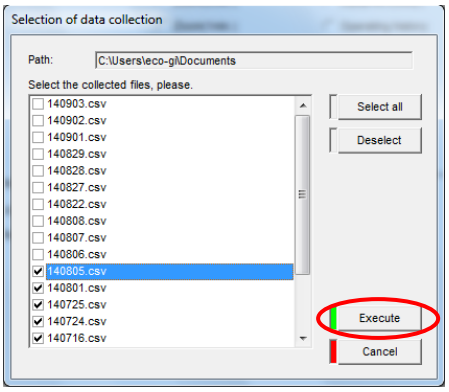
*2 If the login ID or password is incorrect, the message on the right will appear.

Click the [OK] button and then check the login ID and password.



(2) Check the box for the files you want to collect.
To collect all files, click the [Select all] button.

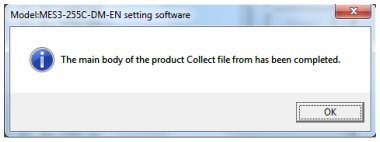
Uncheck the box to cancel the selection.
To cancel all files, click the [Deselect] button.



(3) Click the [Execute] button.
To cancel the collection, click the [Cancel] button.

(4) The screen showing the ongoing data collection will be displayed.
The second line shows the name of the file that is being collected.
To stop the collection, click the [Abort] button.

(5) After the collection on every registered item is completed, the completion message will appear.



4.9.10. Deleting data

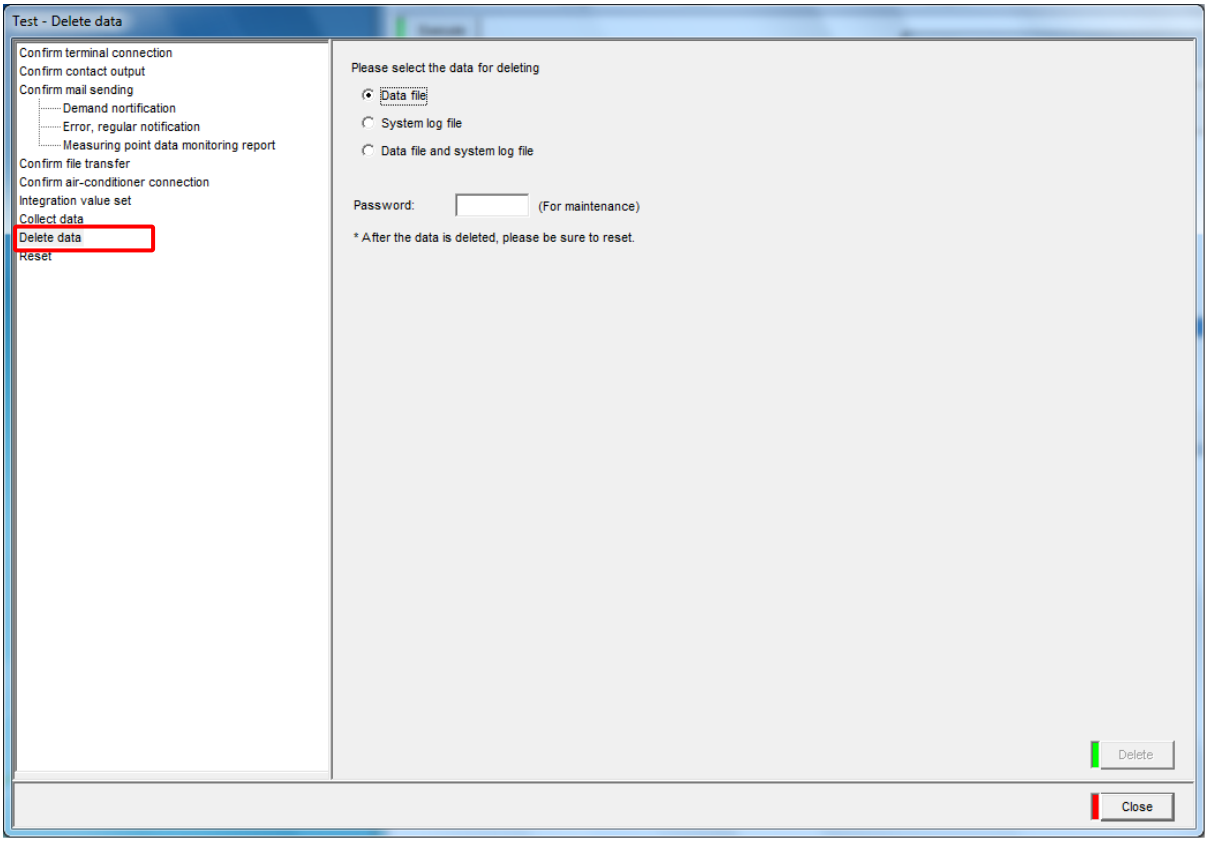
This section explains the operation procedures in the dialog box of [Delete data].

Deleting data

This section explains the procedures to manually delete data stored in EcoWebServerIII.

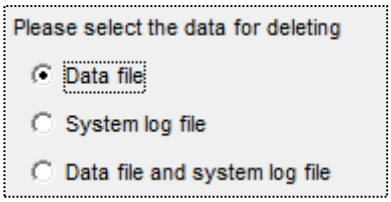
1 Displaying the [Delete data] dialog box

Click [Delete data] in the tree menu on the [Test] dialog box.



2 Selecting the data to delete

Select the data to delete by clicking the radio button [●].



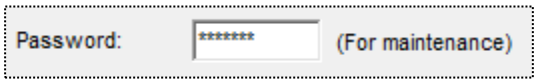
The files that can be deleted are as follow.

Data file	Daily data, Monthly data, Annual data, Zoom (5-minute) data, Zoom (1-minute data), Virtual (daily) data, Virtual (monthly) data, Virtual (annual) data, Specific consumption (daily) data, Specific consumption (monthly) data, Specific consumption (annual) data, Equipment (daily) data, Operation history data, Demand (daily) data *, Demand (monthly) data *, Demand (annual) data *, Demand alarm and control history data*
System log file	System log
Data file and system log file	All files listed above

*** The demand (daily) data, demand (monthly) data, demand (annual) data, demand alarm and control history data deletion function is available only for the EcoWebServerIII with demand control function.**

3 Inputting the maintenance password

Type in the maintenance password.

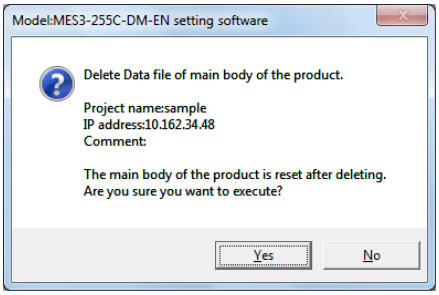


(The default maintenance password is “ecopass”.)

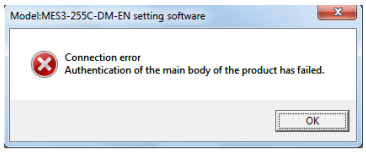
4 Deleting the file

(1) When you click the [Delete] button, the confirmation message will appear.

[Yes] button : Executes the deletion of the files.
[No] button : Cancels the deletion of the files.


Model:MES3-255C-DM-EN setting software
Delete Data file of main body of the product.
Project name:sample
IP address:10.162.34.48
Comment:
The main body of the product is reset after deleting.
Are you sure you want to execute?
Yes
No

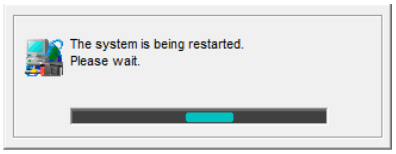
*1 If the IP address of the EcoWebServerIII main unit is not correct, a LAN cable is not connected, or the EcoWebServerIII is not powered on, the message on the right will appear.
Click the [OK] button, and then check the IP address of the EcoWebServerIII, the LAN cable connection, etc., and the power.



*2 If the password is incorrect, the message on the right will appear. Click the [OK] button and then check the login ID and password.

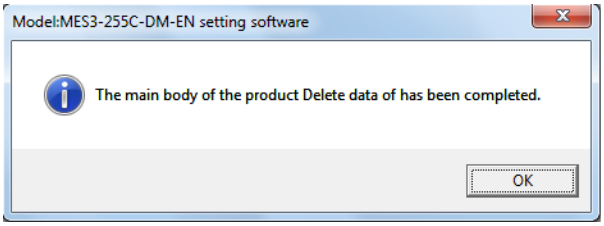
*3 If many files are stored, a timeout may occur. In this case, perform the deletion of the data again.

(2) After the files are deleted, EcoWebServerIII will be reset.



*** It may take up to eight minutes to reset.**

(3) When the deletion of the files and reset are completed, the following message will appear.



Remarks

- Immediately after restarting the EcoServer, daily data file and demand (daily) data file of today is created.
- After erasing the data, incorrect display of the demand measuring screen because there is no data until the start (end) of the next demand time limit (when the remaining time reaches 30:00 (time limit = 30 min)).

4.9.11. EcoWebServerIII reset

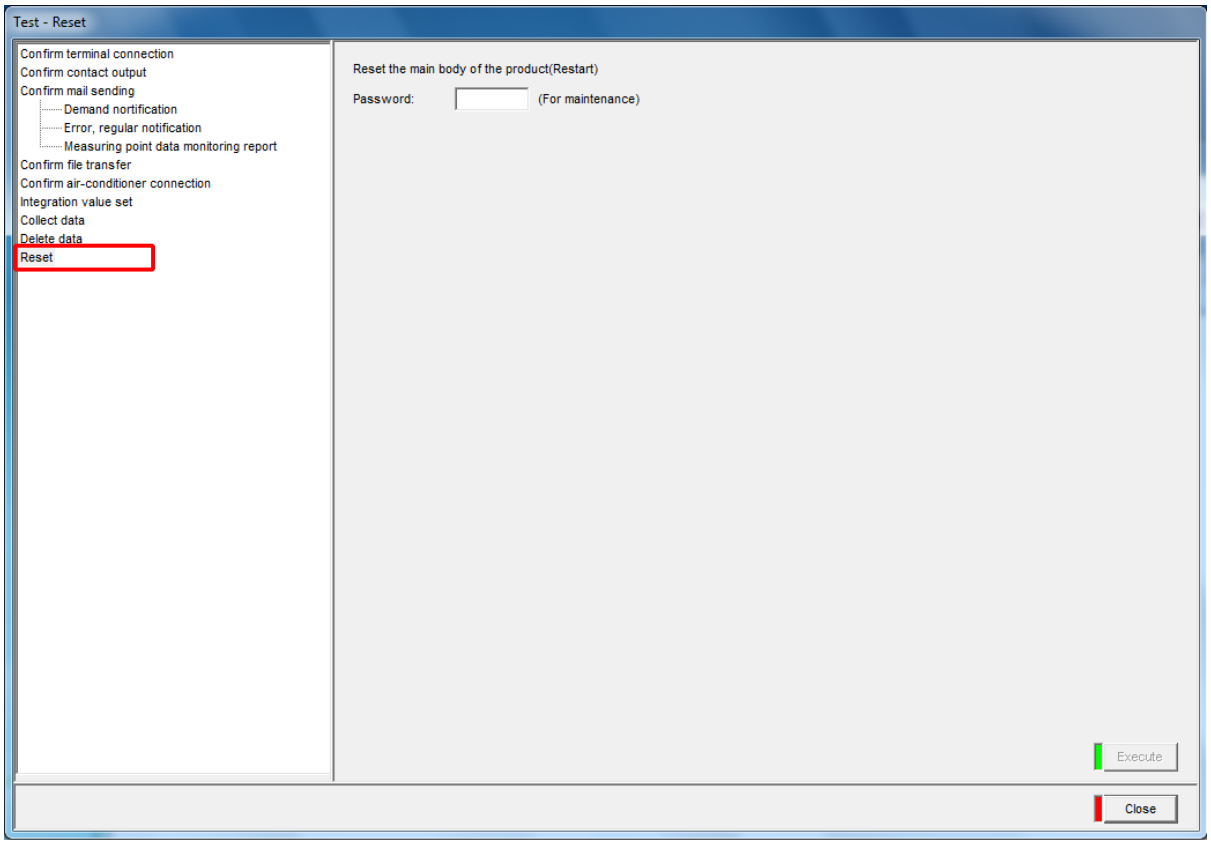
This section explains the operation procedures in the dialog box of [Reset].

Resetting the EcoWebServerIII

This section explains the procedures for resetting (restarting) EcoWebServerIII.

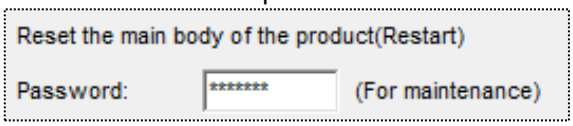
1 Displaying the [Reset] dialog box

Click [Reset] in the tree menu on the [Test] dialog box.



2 Inputting the maintenance password

Type in the maintenance password.

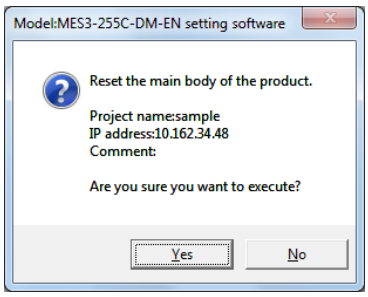


(The default maintenance password is “ecopass”.)

3 Resetting (restart)

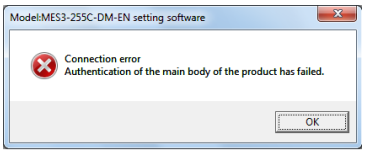
(1) When you click the [Execute] button, the confirmation message will appear.

[Yes] button : Executes the reset.
[No] button : Cancels the reset.



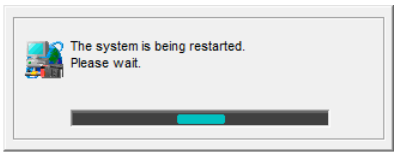
*1 If the IP address of the EcoWebServerIII is not correct, a LAN cable is not connected, or the EcoWebServerIII is not powered on, the message on the right will appear.

Click the [OK] button, and then check the IP address of the EcoWebServerIII, the LAN cable connection, etc., and the power.



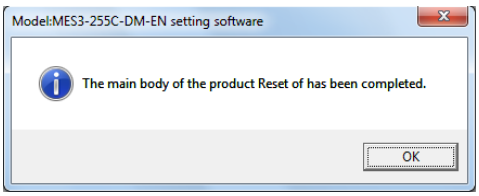
*2 If the password is incorrect, the message on the right will appear. Click the [OK] button and then check the login ID and password.

(2) EcoWebServerIII is reset.



*** It may take up to eight minutes to reset.**

(3) When the reset is completed, the following message will appear.



5. Appendix

5.1. List of support terminals

Product name	Icon/type name		Station type	Number of occupying stations
Energy measuring unit (1P2W, 1P3W, 3P3W)	EMU4-BD1-MB		Remote device station	1 station occupied
Energy measuring unit (1P2W, 1P3W, 3P3W, 3P4W)	EMU4-HD1-MB		Remote device station	1 station occupied
Energy measuring unit (Power reception and distribution monitoring(standard product 3 circuits))	EMU2-RD3-C		Remote device station	1 station occupied
Energy measuring unit (Power reception and distribution monitoring(standard product 5 circuits))	EMU2-RD5-C		Remote device station	1 station occupied
Energy measuring unit (Power reception and distribution monitoring(standard product 7 circuits))	EMU2-RD7-C		Remote device station	1 station occupied
Energy measuring unit (Power reception and distribution monitoring(3P4W 2 circuits))	EMU2-RD2-C-4W		Remote device station	1 station occupied
Energy measuring unit (Power reception and distribution monitoring(3P4W 4 circuits))	EMU2-RD4-C-4W		Remote device station	1 station occupied
Energy measuring unit	EMU3-DP1-C		Remote device station	1 station occupied
MDU breaker (WS-V)	MDU（WS-V）	NF250-SEV/HEV with MDU	Remote device station	1 station occupied
MDU breaker (WS)	MDU(WS)	NF400-SEP/HEP with MDU NF600-SEP/HEP with MDU NF800-SEP/HEP with MDU	Remote device station	1 station occupied
Low-voltage air circuit breaker (AE-SW with CC-Link interface unit)	AE-SW(BIF-CC)		Remote device station	1 station occupied
Electronic multi-measuring instrument	ME96SSR-MB		Remote device station	1 station occupied
Electronic multi-measuring instrument	ME96SSH-MB		Remote device station	1 station occupied
Electronic multi-measuring instrument	ME96NSR		Remote device station	1 station occupied
Electronic multi-measuring instrument with transmission function	ME110SSR-C(H)		Remote device station	1 station occupied

Product name	Icon/type name	Station type	Number of occupying stations
Electronic multi-measuring instrument with transmission function	ME110NSR-C	Remote device station	1 station occupied
Thermocouple temperature input unit	AJ65BT-68TD	Remote device station	4 station occupied
Platinum resistance temperature sensor Pt 100 temperature input unit	AJ65BT-64RD3	Remote device station	4 station occupied
Analog-digital conversion unit	AJ65BT-64AD	Remote device station	2 station occupied
Terminal block type 24 VDC input unit (8 points)	AJ65SBTB1-8D	Remote I/O station	1 station occupied
Terminal block type 24 VDC input unit (16 points)	AJ65SBTB1-16D	Remote I/O station	1 station occupied
Terminal block type 24 VDC input unit (32 points)	AJ65SBTB1-32D	Remote I/O station	1 station occupied
Terminal block type DC input transistor output combined unit (Input 8 points, Output 8 points)	AJ65SBTB1-16DT	Remote I/O station	1 station occupied
Terminal block type DC input transistor output combined unit (Input 16 points, Output 16 points)	AJ65SBTB1-32DT	Remote I/O station	1 station occupied
CC-Link master/local unit (Local station)	QJ61BT11N	Intelligent device station	1 station occupied
CC-Link master/local unit (Local station)	LCPU/LJ61BT11	Intelligent device station	1 station occupied

5.2. List of model information

The following describes the details of setting and setting ranges for models that require the setting of model information on the terminal registration screen.

5.2.1. EMU4-BD1-MB

Setting item	Setting range
Phase wire method	1P2W, 1P3W, 3P3W
Voltage rating	1P2W, 3P3W: 110V, 220V, 440V, 690V, 1100V, 2200V, 3300V, 6600V 1P3W: 110V
Current rating	5A, 6A, 7.5A, 8A, 10A, 12A, 15A, 20A, 25A, 30A, 40A, 50A, 60A, 75A, 80A, 100A, 120A, 150A, 200A, 250A, 300A, 400A, 500A, 600A, 750A, 800A, 1000A, 1200A, 1500A, 1600A, 2000A, 2500A, 3000A, 4000A, 5000A, 6000A

5.2.2. EMU4-HD1-MB

Setting item	Setting range
Phase wire method	1P2W, 1P3W, 3P3W, 3P4W
Voltage rating	1P2W, 3P3W: 110V, 220V, 440V, 690V, 1100V, 2200V, 3300V, 6600V 1P3W: 110V 3P4W: 63.5V, 100V, 105V, 110V, 115V, 120V, 127V, 200V, 220V, 230V, 240V, 242V, 250V, 254V, 265V, 277V
Current rating	5A, 6A, 7.5A, 8A, 10A, 12A, 15A, 20A, 25A, 30A, 40A, 50A, 60A, 75A, 80A, 100A, 120A, 150A, 200A, 250A, 300A, 400A, 500A, 600A, 750A, 800A, 1000A, 1200A, 1500A, 1600A, 2000A, 2500A, 3000A, 4000A, 5000A, 6000A

5.2.3. EMU2-RD3-C, EMU2-RD5-C, EMU2-RD7-C

Setting item	Setting range
Phase wire method	1P2W, 1P3W, 3P3W
Line-to-line voltage rating[*1, *2]	110V, 220V, 440V, 690V, 1100V, 2200V, 3300V, 6600V, 11000V, 13200V, 13800V, 15000V, 16500V, 22000V, 24000V, 33000V, 66000V, 77000V, 110000V
Current rating[*2]	5A, 6A, 7.5A, 8A, 10A, 12A, 15A, 20A, 25A, 30A, 40A, 50A, 60A, 75A, 80A, 100A, 120A, 150A, 200A, 250A, 300A, 400A, 500A, 600A, 750A, 800A, 1000A, 1200A, 1500A, 1600A, 2000A, 2500A, 3000A, 4000A, 5000A, 6000A, 7500A, 8000A, 10000A, 12000A, 20000A, 25000A, 30000A

***1 For 1P3W, the voltage is fixed at 110V.**

***2 The range of Line-to-line voltage rating × Current rating > 88,665 (kW) cannot be set.**

5.2.4. EMU2-RD2-C-4W, EMU2-RD4-C-4W

Setting item	Setting range
Phase wire method	3P4W
Line-to-line voltage rating	63.5/110V, 110/190V, 120/208V, 220/380V, 240/415V, 254/440V
Current rating	5A, 6A, 7.5A, 8A, 10A, 12A, 15A, 20A, 25A, 30A, 40A, 50A, 60A, 75A, 80A, 100A, 120A, 150A, 200A, 250A, 300A, 400A, 500A, 600A, 750A, 800A, 1000A, 1200A, 1500A, 1600A, 2000A, 2500A, 3000A, 4000A, 5000A, 6000A, 7500A, 8000A, 10000A, 12000A, 20000A, 25000A, 30000A

5.2.5. EMU3-DP1-C

Setting item	Setting range
Phase wire method	1P2W, 1P3W, 3P3W
Line-to-line voltage rating[*1]	110V, 220V, 440V
Current rating	60A, 125A

***1 For 1P3W, the voltage is fixed at 110V.**

5.2.6. MDU(WS)

Setting item	Setting range
Ampere frame	225AF or lower, 400AF or higher

5.2.7. AE-SW(BIF-CC)

Setting item	Setting range
CT rating	Lower than 500A, 500A or higher and lower than 1000A, 1000A or higher

5.2.8. ME96SSR-MB, ME96SSH-MB

Setting item	Setting range
Phase wire method	1P2W, 1P3W, 3P3W, 3P4W
Rated voltage	1P2W, 3P3W: 60V − 750000V 1P3W: 110V, 220V 3P4W: 60V - 750000V
Rated current	1.0A - 30000A

5.2.9. ME110SSR-C(H)

Setting item	Setting range
Phase wire method	1P2W, 1P3W, 3P3W, 3P4W
Line-to-line voltage rating[*1]	1P2W, 3P3W: 110V, 220V, 440V, 690V, 1,100V, 2,200V, 3,300V, 6,600V, 11,000V, 13,200V, 13,800V, 15,000V, 16,500V, 22,000V, 24,000V, 33,000V, 66,000V, 77,000V, 110,000V, 132,000V, 154,000V, 187,000V, 220,000V, 275,000V, 380,000V, 500,000V, 550,000V 1P3W: 220V 3P4W: 63.5/110V, 110/190V, 120/208V, 220/380V, 240/415V, 254/440V
Current rating[*2]	5A, 6A, 7.5A, 8A, 10A, 12A, 15A, 20A, 25A, 30A, 40A, 50A, 60A, 75A, 80A, 100A, 120A, 150A, 200A, 250A, 300A, 400A, 500A, 600A, 750A, 800A, 1000A, 1200A, 1500A, 1600A, 2000A, 2500A, 3000A, 4000A, 5000A, 6000A, 7500A, 8000A, 10000A

***1 The range of Line-to-line voltage rating / 110 × Current rating / 5 ≥ 122,500 cannot be set.**

5.2.10. ME110NSR-C

Setting item	Setting range
Phase wire method	1P2W, 1P3W, 3P3W, 3P4W
Line-to-line voltage rating[*1]	1P2W, 3P3W: 110V, 220V, 440V, 690V, 1100V, 2200V, 3300V, 6600V, 11000V, 13200V, 13800V, 15000V, 16500V, 22000V, 24000V, 33000V, 66000V, 77000V, 110000V, 132000V, 154000V, 187000V, 220000V, 275000V, 380000V, 500000V, 550000V 1P3W: 220V 3P4W: 63.5/110V, 110/190V, 120/208V, 220/380V, 240/415V, 254/440V
Current rating[*1]	5A, 6A, 7.5A, 8A, 10A, 12A, 15A, 20A, 25A, 30A, 40A, 50A, 60A, 75A, 80A, 100A, 120A, 150A, 200A, 250A, 300A, 400A, 500A, 600A, 750A, 800A, 1000A, 1200A, 1500A, 1600A, 2000A, 2500A, 3000A, 4000A, 5000A, 6000A, 7500A, 8000A, 10000A

***1 The range of Line-to-line voltage rating / 110 × Current rating / 5 ≥ 122,500 cannot be set.**

5.2.11. AJ65BT-68TD

Setting item	Setting range
Compensate the cold junction with resistance temperature sensor Pt 100?	Yes (Checked) No (Unchecked)

5.3. List of measured items

The following describes the measured items of the CC-Link terminals supported by EcoWebServerIII.

5.3.1. EMU4-BD1-MB

Measured items	Unit
Electric_energy(Consumption)	kWh
Electric_energy(Regeneration)	kWh
Electric_energy(Consumption)extended	kWh
Electric_energy(Regeneration)extended	kWh
Reactive_energy(Consumption_lag)	kvarh
Reactive_energy(Consumption_lag)extended	kvarh
Current_phase1	A
Current_phase2	A
Current_phase3	A
Current_Average	A
Voltage_phase12	V
Voltage_phase23	V
Voltage_phase31	V
Voltage_Average_line_voltage	V
Electric_power	kW
Reactive_power	kvar
Power_factor	%
Frequency	Hz
Current_demand_phase1	A
Current_demand_phase2	A
Current_demand_phase3	A
Electric_power_demand	kW
Operating_time	H

5.3.2. EMU4-HD1-MB

Measured items	Unit
Electric_energy(Consumption)	kWh
Electric_energy(Regeneration)	kWh
Electric_energy(Consumption)extended	kWh
Electric_energy(Regeneration)extended	kWh
Reactive_energy(Consumption_lag)	kvarh
Reactive_energy(Consumption_lag)extended	kvarh
Current_phase1	A
Current_phase2	A
Current_phase3	A
Current_phaseN	A
Current_Average	A
Voltage_phase12	V
Voltage_phase23	V
Voltage_phase31	V
Voltage_Average_line_voltage	V
Voltage_phase1N	V
Voltage_phase2N	V
Voltage_phase3N	V
Electric_power	kW
Reactive_power	kvar
Power_factor	%
Frequency	Hz
Current_demand_phase1	A
Current_demand_phase2	A
Current_demand_phase3	A
Current_demand_phaseN	A
Electric_power_demand	kW
Periodic_electric_energy	kWh
Operating_time	H
Pulse_count	
HA_RMS_phase1_total	A
HA_RMS_phase1_1st	A
HA_RMS_phase1_3rd	A
HA_RMS_phase1_5th	A
HA_RMS_phase1_7th	A
HA_RMS_phase1_9th	A
HA_RMS_phase1_11th	A
HA_RMS_phase1_13th	A
HA_RMS_phase2_total	A
HA_RMS_phase2_1st	A
HA_RMS_phase2_3rd	A
HA_RMS_phase2_5th	A
HA_RMS_phase2_7th	A
HA_RMS_phase2_9th	A
HA_RMS_phase2_11th	A
HA_RMS_phase2_13th	A
HA_RMS_phase3_total	A
HA_RMS_phase3_1st	A
HA_RMS_phase3_3rd	A
HA_RMS_phase3_5th	A
HA_RMS_phase3_7th	A
HA_RMS_phase3_9th	A
HA_RMS_phase3_11th	A
HA_RMS_phase3_13th	A
HA_RMS_phaseN_total	A
HA_RMS_phaseN_1st	A
HA_RMS_phaseN_3rd	A
HA_RMS_phaseN_5th	A
HA_RMS_phaseN_7th	A
HA_RMS_phaseN_9th	A
HA_RMS_phaseN_11th	A
HA_RMS_phaseN_13th	A

Measured items	Unit
HA_D.ratio_phase1_total	%
HA_D.ratio_phase2_total	%
HA_D.ratio_phase3_total	%
HA_D.ratio_phaseN_total	%
HV_RMS_phase12_total	V
HV_RMS_phase12_1st	V
HV_RMS_phase12_3rd	V
HV_RMS_phase12_5th	V
HV_RMS_phase12_7th	V
HV_RMS_phase12_9th	V
HV_RMS_phase12_11th	V
HV_RMS_phase12_13th	V
HV_RMS_phase23_total	V
HV_RMS_phase23_1st	V
HV_RMS_phase23_3rd	V
HV_RMS_phase23_5th	V
HV_RMS_phase23_7th	V
HV_RMS_phase23_9th	V
HV_RMS_phase23_11th	V
HV_RMS_phase23_13th	V
HV_RMS_phase1N_total	V
HV_RMS_phase1N_1st	V
HV_RMS_phase2N_total	V
HV_RMS_phase2N_1st	V
HV_RMS_phase3N_total	V
HV_RMS_phase3N_1st	V
HV_D.ratio_phase12_total	%
HV_D.ratio_phase12_3rd	%
HV_D.ratio_phase12_5th	%
HV_D.ratio_phase12_7th	%
HV_D.ratio_phase12_9th	%
HV_D.ratio_phase12_11th	%
HV_D.ratio_phase12_13th	%
HV_D.ratio_phase23_total	%
HV_D.ratio_phase23_3rd	%
HV_D.ratio_phase23_5th	%
HV_D.ratio_phase23_7th	%
HV_D.ratio_phase23_9th	%
HV_D.ratio_phase23_11th	%
HV_D.ratio_phase23_13th	%
HV_D.ratio_phase1N_total	%
HV_D.ratio_phase1N_3rd	%
HV_D.ratio_phase1N_5th	%
HV_D.ratio_phase1N_7th	%
HV_D.ratio_phase1N_9th	%
HV_D.ratio_phase1N_11th	%
HV_D.ratio_phase1N_13th	%
HV_D.ratio_phase2N_total	%
HV_D.ratio_phase2N_3rd	%
HV_D.ratio_phase2N_5th	%
HV_D.ratio_phase2N_7th	%
HV_D.ratio_phase2N_9th	%
HV_D.ratio_phase2N_11th	%
HV_D.ratio_phase2N_13th	%
HV_D.ratio_phase3N_total	%
HV_D.ratio_phase3N_3rd	%
HV_D.ratio_phase3N_5th	%
HV_D.ratio_phase3N_7th	%
HV_D.ratio_phase3N_9th	%
HV_D.ratio_phase3N_11th	%
HV_D.ratio_phase3N_13th	%

5.3.3. EMU2-RD3-C, EMU2-RD5-C, EMU2-RD7-B

Measured items	Unit
Active energy	kWh
Reactive energy	kvarh
Current; phase1	A
Current; phase2	A
Current; phase3	A
Current; average	A
Voltage; phase1-2	V
Voltage; phase2-3	V
Voltage; phase3-1	V
Voltage; L-N; average	V
Active power	kW
Reactive power	kvar
Power factor	%
Frequency	Hz
Current demand; phase1	A
Current demand; phase2	A
Current demand; phase3	A
Current demand; maximum phase	A
Electric power demand	kW
HA; phase1 RMS total	A
HA; phase1 RMS 1st	A
HA; phase1 RMS 3rd	A
HA; phase1 RMS 5th	A
HA; phase1 RMS 7th	A
HA; phase1 RMS 9th	A
HA; phase1 RMS 11th	A
HA; phase1 RMS 13th	A
HA; phase3 RMS total	A
HA; phase3 RMS 1st	A
HA; phase3 RMS 3rd	A
HA; phase3 RMS 5th	A
HA; phase3 RMS 7th	A
HA; phase3 RMS 9th	A
HA; phase3 RMS 11th	A
HA; phase3 RMS 13th	A
HA; phase1 D.ratio total	%
HA; phase1 D.ratio 3rd	%
HA; phase1 D.ratio 5th	%
HA; phase1 D.ratio 7th	%
HA; phase1 D.ratio 9th	%
HA; phase1 D.ratio 11th	%
HA; phase1 D.ratio 13th	%
HA; phase3 D.ratio total	%

Measured items	Unit
HA; phase3 D.ratio 3rd	%
HA; phase3 D.ratio 5th	%
HA; phase3 D.ratio 7th	%
HA; phase3 D.ratio 9th	%
HA; phase3 D.ratio 11th	%
HA; phase3 D.ratio 13th	%
HV; phase1-2 RMS total	V
HV; phase1-2 RMS 1st	V
HV; phase1-2 RMS 3rd	V
HV; phase1-2 RMS 5th	V
HV; phase1-2 RMS 7th	V
HV; phase1-2 RMS 9th	V
HV; phase1-2 RMS 11th	V
HV; phase1-2 RMS 13th	V
HV; phase2-3 RMS total	V
HV; phase2-3 RMS 1st	V
HV; phase2-3 RMS 3rd	V
HV; phase2-3 RMS 5th	V
HV; phase2-3 RMS 7th	V
HV; phase2-3 RMS 9th	V
HV; phase2-3 RMS 11th	V
HV; phase2-3 RMS 13th	V
HV; phase1-2 D.ratio total	%
HV; phase1-2 D.ratio 3rd	%
HV; phase1-2 D.ratio 5th	%
HV; phase1-2 D.ratio 7th	%
HV; phase1-2 D.ratio 9th	%
HV; phase1-2 D.ratio 11th	%
HV; phase1-2 D.ratio 13th	%
HV; phase2-3 D.ratio total	%
HV; phase2-3 D.ratio 3rd	%
HV; phase2-3 D.ratio 5th	%
HV; phase2-3 D.ratio 7th	%
HV; phase2-3 D.ratio 9th	%
HV; phase2-3 D.ratio 11th	%
HV; phase2-3 D.ratio 13th	%
Active energy (exp.)	kWh

***1 The measured items differ with the phase wire method.**
For details, refer to the instruction manual or specification sheet of the terminal.

***2 The total current is the average of the currents of the phases. For 3-phase and 3-wire terminals, the average is of R phase, S phase, and T phase.**

***3 The total voltage is the average of the voltages between the lines. For 3-phase and 3-wire terminals, the average is of R-S, S-T, and T-R.**

***4 The demand refers to moving average.**
After step input, the operated value reaches 95% of the input value after the elapse of the preset demand time.
(Example) When the demand time = 2 minutes, an input of 100 A results in the current demand = 95 A in 2 minutes.
For the current demand to reach 100 A, about 6 minutes, about a triple, is required.

***5 The maximum phase current demand is the highest current demand of the current demands of the phases.**

***6 Harmonic current (voltage) total = $\sqrt{\{\Sigma(\text{Harmonic current (voltage) nth})2\}}$ (n = 2 to 20)**

***7 Harmonic current (voltage) nth content = Harmonic current (voltage) nth / Harmonic current (voltage) fundamental wave**

***8 Harmonic current (voltage) total distortion rate = Harmonic current (voltage) total / Harmonic current (voltage) fundamental wave**

***9 Because the detailed electric energy has a small number of significant digits, the monthly graph (daily amount) and the yearly graph (monthly amount) may not be displayed correctly. For details on the significant digits of electric energy, refer to the instruction manual or specification sheet of the terminal.**

5.3.4. EMU2-RD2-C-4W, EMU2-RD4-C-4W

Measured items	Unit
Active energy	kWh
Reactive energy	kvarh
Current; phase1	A
Current; phase2	A
Current; phase3	A
Current; phaseN	A
Current; average	A
Voltage; phase1-2	V
Voltage; phase2-3	V
Voltage; phase3-1	V
Voltage; L-N; average	V
Voltage; phase1-N	V
Voltage; phase2-N	V
Voltage; phase3-N	V
Active power	kW
Reactive power	kvar
Power factor	%
Frequency	Hz
Current demand; phase1	A
Current demand; phase2	A
Current demand; phase3	A
Current demand; phaseN	A
Current demand; maximum phase	A
Electric power demand	kW
HA; phase1 RMS total	A
HA; phase1 RMS 1st	A
HA; phase1 RMS 3rd	A
HA; phase1 RMS 5th	A
HA; phase1 RMS 7th	A
HA; phase1 RMS 9th	A
HA; phase1 RMS 11th	A
HA; phase1 RMS 13th	A
HA; phase2 RMS total	A
HA; phase2 RMS 1st	A
HA; phase2 RMS 3rd	A
HA; phase2 RMS 5th	A
HA; phase2 RMS 7th	A
HA; phase2 RMS 9th	A
HA; phase2 RMS 11th	A
HA; phase2 RMS 13th	A
HA; phase3 RMS total	A
HA; phase3 RMS 1st	A
HA; phase3 RMS 3rd	A
HA; phase3 RMS 5th	A
HA; phase3 RMS 7th	A
HA; phase3 RMS 9th	A
HA; phase3 RMS 11th	A
HA; phase3 RMS 13th	A
HA; phase1 D.ratio total	%
HA; phase1 D.ratio 3rd	%
HA; phase1 D.ratio 5th	%
HA; phase1 D.ratio 7th	%
HA; phase1 D.ratio 9th	%
HA; phase1 D.ratio 11th	%
HA; phase1 D.ratio 13th	%
HA; phase2 D.ratio total	%
HA; phase2 D.ratio 3rd	%
HA; phase2 D.ratio 5th	%
HA; phase2 D.ratio 7th	%
HA; phase2 D.ratio 9th	%

Measured items	Unit
HA; phase2 D.ratio 11th	%
HA; phase2 D.ratio 13th	%
HA; phase3 D.ratio total	%
HA; phase3 D.ratio 3rd	%
HA; phase3 D.ratio 5th	%
HA; phase3 D.ratio 7th	%
HA; phase3 D.ratio 9th	%
HA; phase3 D.ratio 11th	%
HA; phase3 D.ratio 13th	%
HV; phase1-N RMS total	V
HV; phase1-N RMS 1st	V
HV; phase1-N RMS 3rd	V
HV; phase1-N RMS 5th	V
HV; phase1-N RMS 7th	V
HV; phase1-N RMS 9th	V
HV; phase1-N RMS 11th	V
HV; phase1-N RMS 13th	V
HV; phase2-N RMS total	V
HV; phase2-N RMS 1st	V
HV; phase2-N RMS 3rd	V
HV; phase2-N RMS 5th	V
HV; phase2-N RMS 7th	V
HV; phase2-N RMS 9th	V
HV; phase2-N RMS 11th	V
HV; phase2-N RMS 13th	V
HV; phase3-N RMS total	V
HV; phase3-N RMS 1st	V
HV; phase3-N RMS 3rd	V
HV; phase3-N RMS 5th	V
HV; phase3-N RMS 7th	V
HV; phase3-N RMS 9th	V
HV; phase3-N RMS 11th	V
HV; phase3-N RMS 13th	V
HV; phase1-N D.ratio total	%
HV; phase1-N D.ratio 3rd	%
HV; phase1-N D.ratio 5th	%
HV; phase1-N D.ratio 7th	%
HV; phase1-N D.ratio 9th	%
HV; phase1-N D.ratio 11th	%
HV; phase1-N D.ratio 13th	%
HV; phase2-N D.ratio total	%
HV; phase2-N D.ratio 3rd	%
HV; phase2-N D.ratio 5th	%
HV; phase2-N D.ratio 7th	%
HV; phase2-N D.ratio 9th	%
HV; phase2-N D.ratio 11th	%
HV; phase2-N D.ratio 13th	%
HV; phase3-N D.ratio total	%
HV; phase3-N D.ratio 3rd	%
HV; phase3-N D.ratio 5th	%
HV; phase3-N D.ratio 7th	%
HV; phase3-N D.ratio 9th	%
HV; phase3-N D.ratio 11th	%
HV; phase3-N D.ratio 13th	%
Active energy (exp.)	kWh

***1 The total current is the average of R phase, S phase, and T phase.**
***2 The total voltage is the average of R-S, S-T, and T-R.**
***3 The demand refers to moving average.**
After step input, the operated value reaches 95% of the input value after the elapse of the preset demand time.
(Example) When the demand time = 2 minutes, an input of 100 A results in the current demand = 95 A in 2 minutes.
For the current demand to reach 100 A, about 6 minutes, about a triple, is required.
***4 The maximum phase current demand is the highest current demand of the current demands of the phases.**
***5 Harmonic current (voltage) total = $\sqrt{\{\Sigma \text{ (Harmonic current (voltage) nth)}^2\}}$ (n = 2 to 20)**
***6 Harmonic current (voltage) nth content = Harmonic current (voltage) nth / Harmonic current (voltage) fundamental wave**
***7 Harmonic current (voltage) total distortion rate = Harmonic current (voltage) total / Harmonic current (voltage) fundamental wave**
***8 Because the detailed electric energy has a small number of significant digits, the monthly graph (daily amount) and the yearly graph (monthly amount) may not be displayed correctly.**
For details on the significant digits of electric energy, refer to the instruction manual or specification sheet of the terminal.

5.3.5. EMU3-DP1-C

Measured items	Unit
Active energy	kWh
Reactive energy	kvarh
Current; phase1	A
Current; phase2	A
Current; phase3	A
Current; average	A
Voltage; phase1-2	V
Voltage; phase2-3	V
Voltage; phase3-1	V
Voltage; L-N; average	V
Leakage current	mA
Leakage current; Harmonic	mA
Active power	kW
Reactive power	kvar
Power factor	%
Frequency	Hz
Current demand; phase1	A
Current demand; phase2	A
Current demand; phase3	A
Leakage current demand	mA
Leakage current demand; Harmonic	mA
Electric power demand	kW
HA; phase1 RMS total	A
HA; phase1 RMS 1st	A
HA; phase1 RMS 3rd	A
HA; phase1 RMS 5th	A
HA; phase1 RMS 7th	A
HA; phase1 RMS 9th	A
HA; phase1 RMS 11th	A
HA; phase1 RMS 13th	A
HA; phase1 RMS 15th	A
HA; phase1 RMS 17th	A
HA; phase1 RMS 19th	A
HA; phase3 RMS total	A
HA; phase3 RMS 1st	A
HA; phase3 RMS 3rd	A
HA; phase3 RMS 5th	A

Measured items	Unit
HA; phase3 RMS 7th	A
HA; phase3 RMS 9th	A
HA; phase3 RMS 11th	A
HA; phase3 RMS 13th	A
HA; phase3 RMS 15th	A
HA; phase3 RMS 17th	A
HA; phase3 RMS 19th	A
HA; phase1 D.ratio total	%
HA; phase1 D.ratio 3rd	%
HA; phase1 D.ratio 5th	%
HA; phase1 D.ratio 7th	%
HA; phase1 D.ratio 9th	%
HA; phase1 D.ratio 11th	%
HA; phase1 D.ratio 13th	%
HA; phase1 D.ratio 15th	%
HA; phase1 D.ratio 17th	%
HA; phase1 D.ratio 19th	%
HA; phase3 D.ratio total	%
HA; phase3 D.ratio 3rd	%
HA; phase3 D.ratio 5th	%
HA; phase3 D.ratio 7th	%
HA; phase3 D.ratio 9th	%
HA; phase3 D.ratio 11th	%
HA; phase3 D.ratio 13th	%
HA; phase3 D.ratio 15th	%
HA; phase3 D.ratio 17th	%
HA; phase3 D.ratio 19th	%
Active energy (exp.)	kWh
Pulse counter value 1	*8
Pulse counter value 2	*8
Operating time 1	Min
Operating time 2	Min
Active energy (Operating:1)	kWh
Active energy (Operating:2)	kWh

***1 The total current is the average of R phase, S phase, and T phase.**

***2 The total voltage is the average of R-S, S-T, and T-R.**

***3 The demand refers to moving average.**
After step input, the operated value reaches 95% of the input value after the elapse of the preset demand time.
(Example) When the demand time = 2 minutes, an input of 100 A results in the current demand = 95 A in 2 minutes.
For the current demand to reach 100 A, about 6 minutes, about a triple, is required.

***4 Harmonic current (voltage) total = $\sqrt{\{\Sigma(\text{Harmonic current (voltage) nth})^2\}}$ (n = 2 to 20)**

***5 Harmonic current (voltage) nth content = Harmonic current (voltage) nth / Harmonic current (voltage) fundamental wave**

***6 Harmonic current (voltage) total distortion rate = Harmonic current (voltage) total / Harmonic current (voltage) fundamental wave**

***7 Because the detailed electric energy has a small number of significant digits, the monthly graph (daily amount) and the yearly graph (monthly amount) may not be displayed correctly. For details on the significant digits of electric energy, refer to the instruction manual or specification sheet of the terminal.**

***8 For the pulse counter values, arbitrary characters (a maximum of 8 characters) can be set as the unit.**

***9 For the pulse counter values, 0.001 to 99999 (5 digits including the decimal point, up to 3 places after the decimal point) can be set as the multiplier.**
Make sure that the pulse counter value for 1 month does not exceed the product of 999999 and the multiplier.

5.3.6. MDU（WS-V）

Measured items	Unit
Active energy	kWh
Reactive energy	kvarh
Current; phase1	A
Current; phase2	A
Current; phase3	A
Current; phaseN	A
Current; average	A
Current; maximum phase	A
Voltage; phase1-2	V
Voltage; phase2-3	V
Voltage; phase3-1	V
Voltage; phase1-N	V
Voltage; phase2-N	V
Voltage; phase3-N	V
Voltage; L-N; average	V
Leakage current	mA
Leakage current; Harmonic	mA
Active power	kW
Reactive energy	kvar
Power factor	%
Frequency	Hz
Current demand; phase1	A
Current demand; phase2	A
Current demand; phase3	A
Current demand; phaseN	A
Current demand; maximum phase	A
Leakage current demand	mA
Leakage current demand; Harmonic	mA
Electric power demand	kW
Reactive power demand	kvar
HA; phase1 RMS total	A
HA; phase2 RMS total	A
HA; phase3 RMS total	A
HA; phaseN RMS total	A
HA; phase1 RMS fundamental	A
HA; phase1 RMS 3rd	A
HA; phase1 RMS 5th	A
HA; phase1 RMS 7th	A
HA; phase1 RMS 9th	A

Measured items	Unit
HA; phase1 RMS 11th	A
HA; phase1 RMS 13th	A
HA; phase1 RMS 15th	A
HA; phase1 RMS 17th	A
HA; phase1 RMS 19th	A
HA; phase2 RMS fundamental	A
HA; phase2 RMS 3rd	A
HA; phase2 RMS 5th	A
HA; phase2 RMS 7th	A
HA; phase2 RMS 9th	A
HA; phase2 RMS 11th	A
HA; phase2 RMS 13th	A
HA; phase2 RMS 15th	A
HA; phase2 RMS 17th	A
HA; phase2 RMS 19th	A
HA; phase3 RMS fundamental	A
HA; phase3 RMS 3rd	A
HA; phase3 RMS 5th	A
HA; phase3 RMS 7th	A
HA; phase3 RMS 9th	A
HA; phase3 RMS 11th	A
HA; phase3 RMS 13th	A
HA; phase3 RMS 15th	A
HA; phase3 RMS 17th	A
HA; phase3 RMS 19th	A
HA; phaseN RMS fundamental	A
HA; phaseN RMS 3rd	A
HA; phaseN RMS 5th	A
HA; phaseN RMS 7th	A
HA; phaseN RMS 9th	A
HA; phaseN RMS 11th	A
HA; phaseN RMS 13th	A
HA; phaseN RMS 15th	A
HA; phaseN RMS 17th	A
HA; phaseN RMS 19th	A
HA demand; phase1 RMS total	A
HA demand; phase2 RMS total	A
HA demand; phase3 RMS total	A
HA demand; phaseN RMS total	A

***1 The measured items differ with the phase wire method.**
For details, refer to the instruction manual or specification sheet of the terminal.
***2 The total current is the average of the currents of the phases. For 3-phase and 3-wire terminals, the average is of R phase, S phase, and T phase.**
***3 The total voltage is the average of the voltages between the lines. For 3-phase and 3-wire terminals, the average is of R-S, S-T, and T-R.**
***4 The demand refers to moving average.**
***5 The maximum phase current (demand) is the highest current (demand) of the currents (demand) of the phases.**

5.3.7. MDU(WS)

Measured items	Unit
Active energy	kWh
Current; phase1	A
Current; phase2	A
Current; phase3	A
Current; phaseN	A
Current; average	A
Current; maximum phase	A
Voltage; phase1-2	V
Voltage; phase2-3	V
Voltage; phase3-1	V
Voltage; phase1-N	V
Voltage; phase2-N	V
Voltage; phase3-N	V
Voltage; L-N; average	V
Leakage current	mA
Leakage current; Harmonic	mA
Active power	kW
Power factor	%
Current demand; phase1	A
Current demand; phase2	A
Current demand; phase3	A
Current demand; phaseN	A
Current demand; maximum phase	A
Leakage current demand	mA
Leakage current demand; Harmonic	mA
Electric power demand	kW
HA; phase1 RMS total	A
HA; phase2 RMS total	A
HA; phase3 RMS total	A
HA; phaseN RMS total	A
HA; phase1 RMS 3rd	A
HA; phase1 RMS 5th	A
HA; phase1 RMS 7th	A
HA; phase1 RMS 9th	A
HA; phase1 RMS 11th	A
HA; phase1 RMS 13th	A

Measured items	Unit
HA; phase1 RMS 15th	A
HA; phase1 RMS 17th	A
HA; phase1 RMS 19th	A
HA; phase2 RMS 3rd	A
HA; phase2 RMS 5th	A
HA; phase2 RMS 7th	A
HA; phase2 RMS 9th	A
HA; phase2 RMS 11th	A
HA; phase2 RMS 13th	A
HA; phase2 RMS 15th	A
HA; phase2 RMS 17th	A
HA; phase2 RMS 19th	A
HA; phase3 RMS 3rd	A
HA; phase3 RMS 5th	A
HA; phase3 RMS 7th	A
HA; phase3 RMS 9th	A
HA; phase3 RMS 11th	A
HA; phase3 RMS 13th	A
HA; phase3 RMS 15th	A
HA; phase3 RMS 17th	A
HA; phase3 RMS 19th	A
HA; phaseN RMS 3rd	A
HA; phaseN RMS 5th	A
HA; phaseN RMS 7th	A
HA; phaseN RMS 9th	A
HA; phaseN RMS 11th	A
HA; phaseN RMS 13th	A
HA; phaseN RMS 15th	A
HA; phaseN RMS 17th	A
HA; phaseN RMS 19th	A
HA demand; phase1 RMS total	A
HA demand; phase2 RMS total	A
HA demand; phase3 RMS total	A
HA demand; phaseN RMS total	A

***1 The measured items differ with the phase wire method.**
For details, refer to the instruction manual or specification sheet of the terminal.

***2 The total current is the average of the currents of the phases. For 3-phase and 3-wire terminals, the average is of R phase, S phase, and T phase.**

***3 The total voltage is the average of the voltages between the lines. For 3-phase and 3-wire terminals, the average is of R-S, S-T, and T-R.**

***4 The demand refers to moving average.**

***5 The maximum phase current (demand) is the highest current (demand) of the currents (demand) of the phases.**

5.3.8. AE-SW(BIF-CC)

Measured items	Unit
Active energy	kWh
Reactive energy (Import:lag)	kvarh
Reactive energy (Import:lead)	kvarh
Current; phase1	A
Current; phase2	A
Current; phase3	A
Current; phaseN	A
Voltage; phase1-2	V
Voltage; phase2-3	V
Voltage; phase3-1	V
Voltage; phase1-N	V
Voltage; phase2-N	V
Voltage; phase3-N	V
Voltage; L-L; maximum	V
Voltage; L-N; maximum	V
Leakage current	A
Active power	kW
Reactive power	kvar
Power factor	%
Frequency	Hz
Current demand; phase1	A
Current demand; phase2	A
Current demand; phase3	A
Current demand; phaseN	A
Current demand; maximum phase	A
Leakage current demand	A
Electric power demand	kW
Reactive power demand	kvar
HA; phase1 RMS total	A
HA; phase2 RMS total	A
HA; phase3 RMS total	A
HA; phaseN RMS total	A
HA; phase1 RMS 1st	A
HA; phase1 RMS 3rd	A
HA; phase1 RMS 5th	A
HA; phase1 RMS 7th	A
HA; phase1 RMS 9th	A
HA; phase1 RMS 11th	A
HA; phase1 RMS 13th	A
HA; phase1 RMS 15th	A
HA; phase1 RMS 17th	A
HA; phase1 RMS 19th	A
HA; phase2 RMS 1st	A
HA; phase2 RMS 3rd	A
HA; phase2 RMS 5th	A
HA; phase2 RMS 7th	A
HA; phase2 RMS 9th	A
HA; phase2 RMS 11th	A
HA; phase2 RMS 13th	A
HA; phase2 RMS 15th	A
HA; phase2 RMS 17th	A
HA; phase2 RMS 19th	A
HA; phase3 RMS 1st	A
HA; phase3 RMS 3rd	A
HA; phase3 RMS 5th	A
HA; phase3 RMS 7th	A
HA; phase3 RMS 9th	A

Measured items	Unit
HA; phase3 RMS 11th	A
HA; phase3 RMS 13th	A
HA; phase3 RMS 15th	A
HA; phase3 RMS 17th	A
HA; phase3 RMS 19th	A
HA; phaseN RMS 1st	A
HA; phaseN RMS 3rd	A
HA; phaseN RMS 5th	A
HA; phaseN RMS 7th	A
HA; phaseN RMS 9th	A
HA; phaseN RMS 11th	A
HA; phaseN RMS 13th	A
HA; phaseN RMS 15th	A
HA; phaseN RMS 17th	A
HA; phaseN RMS 19th	A
HA; phase1 D.ratio total	%
HA; phase1 D.ratio 3rd	%
HA; phase1 D.ratio 5th	%
HA; phase1 D.ratio 7th	%
HA; phase1 D.ratio 9th	%
HA; phase1 D.ratio 11th	%
HA; phase1 D.ratio 13th	%
HA; phase1 D.ratio 15th	%
HA; phase1 D.ratio 17th	%
HA; phase1 D.ratio 19th	%
HA; phase2 D.ratio total	%
HA; phase2 D.ratio 3rd	%
HA; phase2 D.ratio 5th	%
HA; phase2 D.ratio 7th	%
HA; phase2 D.ratio 9th	%
HA; phase2 D.ratio 11th	%
HA; phase2 D.ratio 13th	%
HA; phase2 D.ratio 15th	%
HA; phase2 D.ratio 17th	%
HA; phase2 D.ratio 19th	%
HA; phase3 D.ratio total	%
HA; phase3 D.ratio 3rd	%
HA; phase3 D.ratio 5th	%
HA; phase3 D.ratio 7th	%
HA; phase3 D.ratio 9th	%
HA; phase3 D.ratio 11th	%
HA; phase3 D.ratio 13th	%
HA; phase3 D.ratio 15th	%
HA; phase3 D.ratio 17th	%
HA; phase3 D.ratio 19th	%
HA; phaseN D.ratio total	%
HA; phaseN D.ratio 3rd	%
HA; phaseN D.ratio 5th	%
HA; phaseN D.ratio 7th	%
HA; phaseN D.ratio 9th	%
HA; phaseN D.ratio 11th	%
HA; phaseN D.ratio 13th	%
HA; phaseN D.ratio 15th	%
HA; phaseN D.ratio 17th	%
HA; phaseN D.ratio 19th	%
VA	kVA
VA demand	kVA

***1 The measured items differ with the phase wire method.**
For details, refer to the instruction manual or specification sheet of the terminal.

***2 The total current is the average of the currents of the phases. For 3-phase and 3-wire terminals, the average is of R phase, S phase, and T phase.**

***3 The total voltage is the average of the voltages between the lines. For 3-phase and 3-wire terminals, the average is of R-S, S-T, and T-R.**

***4 The demand refers to moving average.**

***5 The maximum phase current (demand) is the highest current (demand) of the currents (demand) of the phases.**

***6 The maximum voltage is the highest of the voltages between the phases.**

5.3.9. ME96SSR-MB (1P2W, 3P3W)

Measured items	Unit
Active_energy_Import	kWh
Active_energy_Export	kWh
Reactive_energy_Import_lag	kvarh
Reactive_energy_Export_lag	kvarh
Reactive_energy_Import_lead	kvarh
Reactive_energy_Export_lead	kvarh
Periodic_active_energy_1	kWh
Periodic _active_energy_2	kWh
Operating_time1	h
Operating_time2	h
Average_current	A
Phase1_current	A
Phase2_current	A
Phase3_current	A
Average_current_max	A
Phase1_current_max	A
Phase2_current_max	A
Phase3_current_max	A
Average_current_demand	A
Phase1_current_demand	A
Phase2_current_demand	A
Phase3_current_demand	A
Average_current_demand_max	A
Phase1_current_demand_max	A
Phase2_current_demand_max	A
Phase3_current_demand_max	A
Average L-L voltage	V
1-2_voltage	V
2-3_voltage	V
3-1_voltage	V
Average_L-L_voltage_max	V
1-2_voltage_max	V
2-3_voltage_max	V
3-1_voltage_max	V
Average_L-L_voltage_min	V
1-2_voltage_min	V
2-3_voltage_min	V
3-1_voltage_min	V
Total_active_power	kW
Total_active_power_max	kW
Total_active_power_min	kW
Total_rolling_demand	kW
Total_rolling_demand_max	kW
Total_reactive_power	kvar
Total_reactive_power_max	kvar
Total_reactive_power_min	kvar
Total_power_factor	%
Total_power_factor_max	%
Total_power_factor_min	%
Frequency	Hz
Frequency_max	Hz

Measured items	Unit
1-2_H_voltage_Total	V
1-2_H_voltage_1st	V
1-2_voltage_THD	%
1-2_voltage_HD_3rd	%
1-2_voltage_HD_5th	%
1-2_voltage_HD_7th	%
1-2_voltage_HD_9th	%
1-2_voltage_HD_11th	%
1-2_voltage_HD_13th	%
2-3_H_voltage_Total	V
2-3_H_voltage_1st	V
2-3_voltage_THD	%
2-3_voltage_HD_3rd	%
2-3_voltage_HD_5th	%
2-3_voltage_HD_7th	%
2-3_voltage_HD_9th	%
2-3_voltage_HD_11th	%
2-3_voltage_HD_13th	%
1-H_current_Total	A
1-H_current_1st	A
1-H_current_3rd	A
1-H_current_5th	A
1-H_current_7th	A
1-H_current_9th	A
1-H_current_11th	A
1-H_current_13th	A
1_current_THD	%
2-H_current_Total	A
2-H_current_1st	A
2-H_current_3rd	A
2-H_current_5th	A
2-H_current_7th	A
2-H_current_9th	A
2-H_current_11th	A
2-H_current_13th	A
2_current_THD	%
3-H_current_Total	A
3-H_current_1st	A
3-H_current_3rd	A
3-H_current_5th	A
3-H_current_7th	A
3-H_current_9th	A
3-H_current_11th	A
3-H_current_13th	A
3_current_THD	%

***1 The measured items differ with the phase wire method.**
For details, refer to the instruction manual or specification sheet of the terminal.

***2 The total current is the average of 1 phase current, 2 phase current, and 3 phase current.**

***3 The total voltage (line-to-line) is the average of 1-2 voltage, 2-3 voltage, and 3-1 voltage.**

***4 The total voltage (phase) is the average of 1-N voltage, 2-N voltage, and 3-N voltage.**

***5 The demand refers to moving average.**
After step input, the operated value reaches 95% of the input value after the elapse of the preset demand time.
(Example) When the demand time = 2 minutes, an input of 100 A results in the current demand = 95 A in 2 minutes.
For the current demand to reach 100 A, about 6 minutes, about a triple, is required.

***6 Harmonic current (voltage) total = $\sqrt{\{\Sigma(\text{Harmonic current (voltage) nth})^2\}}$ (n = 2 to 20)**

***7 Harmonic current (voltage) nth content = Harmonic current (voltage) nth / Harmonic current (voltage) fundamental wave**

***8 Harmonic current (voltage) total distortion rate = Harmonic current (voltage) total / Harmonic current (voltage) fundamental wave**

5.3.10. ME96SSR-MB (1P3W)

Measured items	Unit
Active_energy_Import	kWh
Active_energy_Export	kWh
Reactive_energy_Import_lag	kvarh
Reactive_energy_Export_lag	kvarh
Reactive_energy_Import_lead	kvarh
Reactive_energy_Export_lead	kvarh
Periodic_active_energy_1	kWh
Periodic _active_energy_2	kWh
Operating_time1	h
Operating_time2	h
Average_current	A
Phase1_current	A
Phase2_current	A
Phase3_current	A
Average_current_max	A
Phase1_current_max	A
Phase2_current_max	A
Phase3_current_max	A
Average_current_demand	A
Phase1_current_demand	A
Phase2_current_demand	A
Phase3_current_demand	A
Average_current_demand_max	A
Phase1_current_demand_max	A
Phase2_current_demand_max	A
Phase3_current_demand_max	A
Average L-L voltage	V
1-2_voltage	V
2-3_voltage	V
3-1_voltage	V
Average_L-L_voltage_max	V
1-2_voltage_max	V
2-3_voltage_max	V
3-1_voltage_max	V
Average_L-L_voltage_min	V
1-2_voltage_min	V
2-3_voltage_min	V
3-1_voltage_min	V
Total_active_power	kW
Total_active_power_max	kW
Total_active_power_min	kW
Total_rolling_demand	kW
Total_rolling_demand_max	kW
Total_reactive_power	kvar
Total_reactive_power_max	kvar
Total_reactive_power_min	kvar

Measured items	Unit
Total_power_factor	%
Total_power_factor_max	%
Total_power_factor_min	%
Frequency	Hz
Frequency_max	Hz
1-2_H_voltage_Total	V
1-2_H_voltage_1st	V
1-2_voltage_THD	%
1-2_voltage_HD_3rd	%
1-2_voltage_HD_5th	%
1-2_voltage_HD_7th	%
1-2_voltage_HD_9th	%
1-2_voltage_HD_11th	%
1-2_voltage_HD_13th	%
2-3_H_voltage_Total	V
2-3_H_voltage_1st	V
2-3_voltage_THD	%
2-3_voltage_HD_3rd	%
2-3_voltage_HD_5th	%
2-3_voltage_HD_7th	%
2-3_voltage_HD_9th	%
2-3_voltage_HD_11th	%
2-3_voltage_HD_13th	%
1-H_current_Total	A
1-H_current_1st	A
1-H_current_3rd	A
1-H_current_5th	A
1-H_current_7th	A
1-H_current_9th	A
1-H_current_11th	A
1-H_current_13th	A
1_current_THD	%
3-H_current_Total	A
3-H_current_1st	A
3-H_current_3rd	A
3-H_current_5th	A
3-H_current_7th	A
3-H_current_9th	A
3-H_current_11th	A
3-H_current_13th	A
3_current_THD	%

***1 The measured items differ with the phase wire method.**
For details, refer to the instruction manual or specification sheet of the terminal.
***2 The total current is the average of 1 phase current, 2 phase current, and 3 phase current.**
***3 The total voltage (line-to-line) is the average of 1-2 voltage, 2-3 voltage, and 3-1 voltage.**
***4 The total voltage (phase) is the average of 1-N voltage, 2-N voltage, and 3-N voltage.**
***5 The demand refers to moving average.**
After step input, the operated value reaches 95% of the input value after the elapse of the preset demand time.
(Example) When the demand time = 2 minutes, an input of 100 A results in the current demand = 95 A in 2 minutes.
For the current demand to reach 100 A, about 6 minutes, about a triple, is required.
***6 Harmonic current (voltage) total = $\sqrt{\{\Sigma(\text{Harmonic current (voltage) nth})^2\}}$ (n = 2 to 20)**
***7 Harmonic current (voltage) nth content = Harmonic current (voltage) nth / Harmonic current (voltage) fundamental wave**
***8 Harmonic current (voltage) total distortion rate = Harmonic current (voltage) total / Harmonic current (voltage) fundamental wave**

5.3.11. ME96SSR-MB (3P4W)

Measured items	Unit
Active_energy_Import	kWh
Active_energy_Export	kWh
Reactive_energy_Import_lag	kvarh
Reactive_energy_Export_lag	kvarh
Reactive_energy_Import_lead	kvarh
Reactive_energy_Export_lead	kvarh
Apparent_energy	kVAh
Periodic_active_energy_1	kWh
Periodic _active_energy_2	kWh
Operating_time1	h
Operating_time2	h
Average_current	A
Phase1_current	A
Phase2_current	A
Phase3_current	A
PhaseN_current	A
Average_current_max	A
Phase1_current_max	A
Phase2_current_max	A
Phase3_current_max	A
PhaseN_current_max	A
Average_current_demand	A
Phase1_current_demand	A
Phase2_current_demand	A
Phase3_current_demand	A
PhaseN_current_demand	A
Average_current_demand_max	A
Phase1_current_demand_max	A
Phase2_current_demand_max	A
Phase3_current_demand_max	A
PhaseN_current_demand_max	A
Average L-L voltage	V
1-2_voltage	V
2-3_voltage	V
3-1_voltage	V
Average_L-L_voltage_max	V
1-2_voltage_max	V
2-3_voltage_max	V
3-1_voltage_max	V
Average_L-L_voltage_min	V
1-2_voltage_min	V
2-3_voltage_min	V
3-1_voltage_min	V
Average_L-N_voltage	V
1-N_voltage	V
2-N_voltage	V
3-N_voltage	V
Average_L-N_voltage_max	V
1-N_voltage_max	V
2-N_voltage_max	V
3-N_voltage_max	V
Average_L-N_voltage_min	V
1-N_voltage_min	V
2-N_voltage_min	V
3-N_voltage_min	V

Measured items	Unit
Total_active_power	kW
Phase1_active_power	kW
Phase2_active_power	kW
Phase3_active_power	kW
Total_active_power_max	kW
Phase1_active_power_max	kW
Phase2_active_power_max	kW
Phase3_active_power_max	kW
Total_active_power_min	kW
Phase1_active_power_min	kW
Phase2_active_power_min	kW
Phase3_active_power_min	kW
Total_rolling_demand	kW
Total_rolling_demand_max	kW
Total_reactive_power	kvar
Phase1_reactive_power	kvar
Phase2_reactive_power	kvar
Phase3_reactive_power	kvar
Total_reactive_power_max	kvar
Phase1_reactive_power_max	kvar
Phase2_reactive_power_max	kvar
Phase3_reactive_power_max	kvar
Total_reactive_power_min	kvar
Phase1_reactive_power_min	kvar
Phase2_reactive_power_min	kvar
Phase3_reactive_power_min	kvar
Total_apparent_power	kVA
Phase1_apparent_power	kVA
Phase2_apparent_power	kVA
Phase3_apparent_power	kVA
Total_apparent_power_max	kVA
Phase1_apparent_power_max	kVA
Phase2_apparent_power_max	kVA
Phase3_apparent_power_max	kVA
Total_power_factor	%
Phase1_power_factor	%
Phase2_power_factor	%
Phase3_power_factor	%
Total_power_factor_max	%
Phase1_power_factor_max	%
Phase2_power_factor_max	%
Phase3_power_factor_max	%
Total_power_factor_min	%
Phase1_power_factor_min	%
Phase2_power_factor_min	%
Phase3_power_factor_min	%
Frequency	Hz
Frequency_max	Hz

Measured items	Unit
1-N_H_voltage_Total	V
1-N_H_voltage_1st	V
1-N_voltage_THD	%
1-N_voltage_HD_3rd	%
1-N_voltage_HD_5th	%
1-N_voltage_HD_7th	%
1-N_voltage_HD_9th	%
1-N_voltage_HD_11th	%
1-N_voltage_HD_13th	%
2-N_H_voltage_Total	V
2-N_H_voltage_1st	V
2-N_voltage_THD	%
2-N_voltage_HD_3rd	%
2-N_voltage_HD_5th	%
2-N_voltage_HD_7th	%
2-N_voltage_HD_9th	%
2-N_voltage_HD_11th	%
2-N_voltage_HD_13th	%
3-N_H_voltage_Total	V
3-N_H_voltage_1st	V
3-N_voltage_THD	%
3-N_voltage_HD_3rd	%
3-N_voltage_HD_5th	%
3-N_voltage_HD_7th	%
3-N_voltage_HD_9th	%
3-N_voltage_HD_11th	%
3-N_voltage_HD_13th	%
1-H_current_Total	A
1-H_current_1st	A
1-H_current_3rd	A
1-H_current_5th	A
1-H_current_7th	A
1-H_current_9th	A
1-H_current_11th	A
1-H_current_13th	A
1_current_THD	%

Measured items	Unit
2-H_current_Total	A
2-H_current_1st	A
2-H_current_3rd	A
2-H_current_5th	A
2-H_current_7th	A
2-H_current_9th	A
2-H_current_11th	A
2-H_current_13th	A
2_current_THD	%
3-H_current_Total	A
3-H_current_1st	A
3-H_current_3rd	A
3-H_current_5th	A
3-H_current_7th	A
3-H_current_9th	A
3-H_current_11th	A
3-H_current_13th	A
3_current_THD	%
N-H_current_Total	A
N-H_current_1st	A
N-H_current_3rd	A
N-H_current_5th	A
N-H_current_7th	A
N-H_current_9th	A
N-H_current_11th	A
N-H_current_13th	A

***1 The measured items differ with the phase wire method.**
For details, refer to the instruction manual or specification sheet of the terminal.
***2 The total current is the average of 1 phase current, 2 phase current, and 3 phase current.**
***3 The total voltage (line-to-line) is the average of 1-2 voltage, 2-3 voltage, and 3-1 voltage.**
***4 The total voltage (phase) is the average of 1-N voltage, 2-N voltage, and 3-N voltage.**
***5 The demand refers to moving average.**
After step input, the operated value reaches 95% of the input value after the elapse of the preset demand time.
(Example) When the demand time = 2 minutes, an input of 100 A results in the current demand = 95 A in 2 minutes.
For the current demand to reach 100 A, about 6 minutes, about a triple, is required.
***6 Harmonic current (voltage) total = $\sqrt{\{\Sigma(\text{Harmonic current (voltage) nth})^2\}}$ (n = 2 to 20)**
***7 Harmonic current (voltage) nth content = Harmonic current (voltage) nth / Harmonic current (voltage) fundamental wave**
***8 Harmonic current (voltage) total distortion rate = Harmonic current (voltage) total / Harmonic current (voltage) fundamental wave**

5.3.12. ME96SSH-MB (1P2W, 3P3W)

Measured items	Unit
Active_energy_Import	kWh
Active_energy_Export	kWh
Reactive_energy_Import_lag	kvarh
Reactive_energy_Export_lag	kvarh
Reactive_energy_Import_lead	kvarh
Reactive_energy_Export_lead	kvarh
Periodic_active_energy_1	kWh
Periodic _active_energy_2	kWh
Operating_time1	h
Operating_time2	h
Average_current	A
Phase1_current	A
Phase2_current	A
Phase3_current	A
Average_current_max	A
Phase1_current_max	A
Phase2_current_max	A
Phase3_current_max	A
Average_current_demand	A
Phase1_current_demand	A
Phase2_current_demand	A
Phase3_current_demand	A
Average_current_demand_max	A
Phase1_current_demand_max	A
Phase2_current_demand_max	A
Phase3_current_demand_max	A
Average L-L voltage	V
1-2_voltage	V
2-3_voltage	V
3-1_voltage	V
Average_L-L_voltage_max	V
1-2_voltage_max	V
2-3_voltage_max	V
3-1_voltage_max	V
Average_L-L_voltage_min	V
1-2_voltage_min	V
2-3_voltage_min	V
3-1_voltage_min	V
Total_active_power	kW
Total_active_power_max	kW
Total_active_power_min	kW
Total_rolling_demand	kW
Total_rolling_demand_max	kW
Total_reactive_power	kvar
Total_reactive_power_max	kvar
Total_reactive_power_min	kvar
Total_power_factor	%
Total_power_factor_max	%
Total_power_factor_min	%
Frequency	Hz
Frequency_max	Hz
1-2_H_voltage_Total	V
1-2_H_voltage_1st	V
1-2_voltage_THD	%
1-2_voltage_HD_3rd	%
1-2_voltage_HD_5th	%
1-2_voltage_HD_7th	%
1-2_voltage_HD_9th	%
1-2_voltage_HD_11th	%
1-2_voltage_HD_13th	%
1-2_voltage_HD_15th	%
1-2_voltage_HD_17th	%
1-2_voltage_HD_19th	%
1-2_voltage_HD_21st	%
1-2_voltage_HD_23rd	%
1-2_voltage_HD_25th	%
1-2_voltage_HD_27th	%
1-2_voltage_HD_29th	%
1-2_voltage_HD_31st	%

Measured items	Unit
2-3_H_voltage_Total	V
2-3_H_voltage_1st	V
2-3_voltage_THD	%
2-3_voltage_HD_3rd	%
2-3_voltage_HD_5th	%
2-3_voltage_HD_7th	%
2-3_voltage_HD_9th	%
2-3_voltage_HD_11th	%
2-3_voltage_HD_13th	%
2-3_voltage_HD_15th	%
2-3_voltage_HD_17th	%
2-3_voltage_HD_19th	%
2-3_voltage_HD_21st	%
2-3_voltage_HD_23rd	%
2-3_voltage_HD_25th	%
2-3_voltage_HD_27th	%
2-3_voltage_HD_29th	%
2-3_voltage_HD_31st	%
1-H_current_Total	A
1-H_current_1st	A
1-H_current_3rd	A
1-H_current_5th	A
1-H_current_7th	A
1-H_current_9th	A
1-H_current_11th	A
1-H_current_13th	A
1-H_current_15th	A
1-H_current_17th	A
1-H_current_19th	A
1-H_current_21st	A
1-H_current_23rd	A
1-H_current_25th	A
1-H_current_27th	A
1-H_current_29th	A
1-H_current_31th	A
1_current_THD	%
2-H_current_Total	A
2-H_current_1st	A
2-H_current_3rd	A
2-H_current_5th	A
2-H_current_7th	A
2-H_current_9th	A
2-H_current_11th	A
2-H_current_13th	A
2-H_current_15th	A
2-H_current_17th	A
2-H_current_19th	A
2-H_current_21st	A
2-H_current_23rd	A
2-H_current_25th	A
2-H_current_27th	A
2-H_current_29th	A
2-H_current_31th	A
2_current_THD	%
3-H_current_Total	A
3-H_current_1st	A
3-H_current_3rd	A
3-H_current_5th	A
3-H_current_7th	A
3-H_current_9th	A
3-H_current_11th	A
3-H_current_13th	A
3-H_current_15th	A
3-H_current_17th	A
3-H_current_19th	A
3-H_current_21st	A
3-H_current_23rd	A
3-H_current_25th	A
3-H_current_27th	A
3-H_current_29th	A
3-H_current_31th	A
3_current_THD	%

***1 The measured items differ with the phase wire method.**
For details, refer to the instruction manual or specification sheet of the terminal.
***2 The total current is the average of 1 phase current, 2 phase current, and 3 phase current.**
***3 The total voltage (line-to-line) is the average of 1-2 voltage, 2-3 voltage, and 3-1 voltage.**
***4 The total voltage (phase) is the average of 1-N voltage, 2-N voltage, and 3-N voltage.**
***5 The demand refers to moving average.**
After step input, the operated value reaches 95% of the input value after the elapse of the preset demand time.
(Example) When the demand time = 2 minutes, an input of 100 A results in the current demand = 95 A in 2 minutes.
For the current demand to reach 100 A, about 6 minutes, about a triple, is required.
***6 Harmonic current (voltage) total = $\sqrt{\{\Sigma(\text{Harmonic current (voltage) nth})^2\}}$ (n = 2 to 20)**
***7 Harmonic current (voltage) nth content = Harmonic current (voltage) nth / Harmonic current (voltage) fundamental wave**
***8 Harmonic current (voltage) total distortion rate = Harmonic current (voltage) total / Harmonic current (voltage) fundamental wave**

5.3.13. ME96SSH-MB (1P3W)

Measured items	Unit
Active_energy_Import	kWh
Active_energy_Export	kWh
Reactive_energy_Import_lag	kvarh
Reactive_energy_Export_lag	kvarh
Reactive_energy_Import_lead	kvarh
Reactive_energy_Export_lead	kvarh
Periodic_active_energy_1	kWh
Periodic _active_energy_2	kWh
Operating_time1	h
Operating_time2	h
Average_current	A
Phase1_current	A
Phase2_current	A
Phase3_current	A
Average_current_max	A
Phase1_current_max	A
Phase2_current_max	A
Phase3_current_max	A
Average_current_demand	A
Phase1_current_demand	A
Phase2_current_demand	A
Phase3_current_demand	A
Average_current_demand_max	A
Phase1_current_demand_max	A
Phase2_current_demand_max	A
Phase3_current_demand_max	A
Average L-L voltage	V
1-2_voltage	V
2-3_voltage	V
3-1_voltage	V
Average_L-L_voltage_max	V
1-2_voltage_max	V
2-3_voltage_max	V
3-1_voltage_max	V
Average_L-L_voltage_min	V
1-2_voltage_min	V
2-3_voltage_min	V
3-1_voltage_min	V
Total_active_power	kW
Total_active_power_max	kW
Total_active_power_min	kW
Total_rolling_demand	kW
Total_rolling_demand_max	kW
Total_reactive_power	kvar
Total_reactive_power_max	kvar
Total_reactive_power_min	kvar
Total_power_factor	%
Total_power_factor_max	%
Total_power_factor_min	%
Frequency	Hz
Frequency_max	Hz
1-2_H_voltage_Total	V
1-2_H_voltage_1st	V
1-2_voltage_THD	%
1-2_voltage_HD_3rd	%
1-2_voltage_HD_5th	%
1-2_voltage_HD_7th	%
1-2_voltage_HD_9th	%
1-2_voltage_HD_11th	%
1-2_voltage_HD_13th	%
1-2_voltage_HD_15th	%
1-2_voltage_HD_17th	%
1-2_voltage_HD_19th	%
1-2_voltage_HD_21st	%
1-2_voltage_HD_23rd	%
1-2_voltage_HD_25th	%
1-2_voltage_HD_27th	%
1-2_voltage_HD_29th	%
1-2_voltage_HD_31st	%

Measured items	Unit
2-3_H_voltage_Total	V
2-3_H_voltage_1st	V
2-3_voltage_THD	%
2-3_voltage_HD_3rd	%
2-3_voltage_HD_5th	%
2-3_voltage_HD_7th	%
2-3_voltage_HD_9th	%
2-3_voltage_HD_11th	%
2-3_voltage_HD_13th	%
2-3_voltage_HD_15th	%
2-3_voltage_HD_17th	%
2-3_voltage_HD_19th	%
2-3_voltage_HD_21st	%
2-3_voltage_HD_23rd	%
2-3_voltage_HD_25th	%
2-3_voltage_HD_27th	%
2-3_voltage_HD_29th	%
2-3_voltage_HD_31st	%
1-H_current_Total	A
1-H_current_1st	A
1-H_current_3rd	A
1-H_current_5th	A
1-H_current_7th	A
1-H_current_9th	A
1-H_current_11th	A
1-H_current_13th	A
1-H_current_15th	A
1-H_current_17th	A
1-H_current_19th	A
1-H_current_21st	A
1-H_current_23rd	A
1-H_current_25th	A
1-H_current_27th	A
1-H_current_29th	A
1-H_current_31th	A
1_current_THD	%
2-H_current_Total	A
2-H_current_1st	A
2-H_current_3rd	A
2-H_current_5th	A
2-H_current_7th	A
2-H_current_9th	A
2-H_current_11th	A
2-H_current_13th	A
2-H_current_15th	A
2-H_current_17th	A
2-H_current_19th	A
2-H_current_21st	A
2-H_current_23rd	A
2-H_current_25th	A
2-H_current_27th	A
2-H_current_29th	A
2-H_current_31th	A
2_current_THD	%
3-H_current_Total	A
3-H_current_1st	A
3-H_current_3rd	A
3-H_current_5th	A
3-H_current_7th	A
3-H_current_9th	A
3-H_current_11th	A
3-H_current_13th	A
3-H_current_15th	A
3-H_current_17th	A
3-H_current_19th	A
3-H_current_21st	A
3-H_current_23rd	A
3-H_current_25th	A
3-H_current_27th	A
3-H_current_29th	A
3-H_current_31th	A
3_current_THD	%

***1 The measured items differ with the phase wire method.**
For details, refer to the instruction manual or specification sheet of the terminal.
***2 The total current is the average of 1 phase current, 2 phase current, and 3 phase current.**
***3 The total voltage (line-to-line) is the average of 1-2 voltage, 2-3 voltage, and 3-1 voltage.**
***4 The total voltage (phase) is the average of 1-N voltage, 2-N voltage, and 3-N voltage.**
***5 The demand refers to moving average.**
After step input, the operated value reaches 95% of the input value after the elapse of the preset demand time.
(Example) When the demand time = 2 minutes, an input of 100 A results in the current demand = 95 A in 2 minutes.
For the current demand to reach 100 A, about 6 minutes, about a triple, is required.
***6 Harmonic current (voltage) total = $\sqrt{\{\Sigma(\text{Harmonic current (voltage) nth})^2\}}$ (n = 2 to 20)**
***7 Harmonic current (voltage) nth content = Harmonic current (voltage) nth / Harmonic current (voltage) fundamental wave**
***8 Harmonic current (voltage) total distortion rate = Harmonic current (voltage) total / Harmonic current (voltage) fundamental wave**

5.3.14. ME96SSH-MB (3P4W)

Measured items	Unit
Active_energy_Import	kWh
Active_energy_Export	kWh
Reactive_energy_Import_lag	kvarh
Reactive_energy_Export_lag	kvarh
Reactive_energy_Import_lead	kvarh
Reactive_energy_Export_lead	kvarh
Apparent_energy	kVAh
Periodic_active_energy_1	kWh
Periodic _active_energy_2	kWh
Operating_time1	h
Operating_time2	h
Average_current	A
Phase1_current	A
Phase2_current	A
Phase3_current	A
PhaseN_current	A
Average_current_max	A
Phase1_current_max	A
Phase2_current_max	A
Phase3_current_max	A
PhaseN_current_max	A
Average_current_demand	A
Phase1_current_demand	A
Phase2_current_demand	A
Phase3_current_demand	A
PhaseN_current_demand	A
Average_current_demand_max	A
Phase1_current_demand_max	A
Phase2_current_demand_max	A
Phase3_current_demand_max	A
PhaseN_current_demand_max	A
Average L-L voltage	V
1-2_voltage	V
2-3_voltage	V
3-1_voltage	V
Average_L-L_voltage_max	V
1-2_voltage_max	V
2-3_voltage_max	V
3-1_voltage_max	V
Average_L-L_voltage_min	V
1-2_voltage_min	V
2-3_voltage_min	V
3-1_voltage_min	V
Average_L-N_voltage	V
1-N_voltage	V
2-N_voltage	V
3-N_voltage	V
Average_L-N_voltage_max	V
1-N_voltage_max	V
2-N_voltage_max	V
3-N_voltage_max	V
Average_L-N_voltage_min	V
1-N_voltage_min	V
2-N_voltage_min	V
3-N_voltage_min	V

Measured items	Unit
Total_active_power	kW
Phase1_active_power	kW
Phase2_active_power	kW
Phase3_active_power	kW
Total_active_power_max	kW
Phase1_active_power_max	kW
Phase2_active_power_max	kW
Phase3_active_power_max	kW
Total_active_power_min	kW
Phase1_active_power_min	kW
Phase2_active_power_min	kW
Phase3_active_power_min	kW
Total_rolling_demand	kW
Total_rolling_demand_max	kW
Total_reactive_power	kvar
Phase1_reactive_power	kvar
Phase2_reactive_power	kvar
Phase3_reactive_power	kvar
Total_reactive_power_max	kvar
Phase1_reactive_power_max	kvar
Phase2_reactive_power_max	kvar
Phase3_reactive_power_max	kvar
Total_reactive_power_min	kvar
Phase1_reactive_power_min	kvar
Phase2_reactive_power_min	kvar
Phase3_reactive_power_min	kvar
Total_apparent_power	kVA
Phase1_apparent_power	kVA
Phase2_apparent_power	kVA
Phase3_apparent_power	kVA
Total_apparent_power_max	kVA
Phase1_apparent_power_max	kVA
Phase2_apparent_power_max	kVA
Phase3_apparent_power_max	kVA
Total_power_factor	%
Phase1_power_factor	%
Phase2_power_factor	%
Phase3_power_factor	%
Total_power_factor_max	%
Phase1_power_factor_max	%
Phase2_power_factor_max	%
Phase3_power_factor_max	%
Total_power_factor_min	%
Phase1_power_factor_min	%
Phase2_power_factor_min	%
Phase3_power_factor_min	%
Frequency	Hz
Frequency_max	Hz

Measured items	Unit
1-N_H_voltage_Total	V
1-N_H_voltage_1st	V
1-N_voltage_THD	%
1-N_voltage_HD_3rd	%
1-N_voltage_HD_5th	%
1-N_voltage_HD_7th	%
1-N_voltage_HD_9th	%
1-N_voltage_HD_11th	%
1-N_voltage_HD_13th	%
1-N_voltage_HD_15th	%
1-N_voltage_HD_17th	%
1-N_voltage_HD_19th	%
1-N_voltage_HD_21st	%
1-N_voltage_HD_23rd	%
1-N_voltage_HD_25th	%
1-N_voltage_HD_27th	%
1-N_voltage_HD_29th	%
1-N_voltage_HD_31st	%
2-N_H_voltage_Total	V
2-N_H_voltage_1st	V
2-N_voltage_THD	%
2-N_voltage_HD_3rd	%
2-N_voltage_HD_5th	%
2-N_voltage_HD_7th	%
2-N_voltage_HD_9th	%
2-N_voltage_HD_11th	%
2-N_voltage_HD_13th	%
2-N_voltage_HD_15th	%
2-N_voltage_HD_17th	%
2-N_voltage_HD_19th	%
2-N_voltage_HD_21st	%
2-N_voltage_HD_23rd	%
2-N_voltage_HD_25th	%
2-N_voltage_HD_27th	%
2-N_voltage_HD_29th	%
2-N_voltage_HD_31st	%
3-N_H_voltage_Total	V
3-N_H_voltage_1st	V
3-N_voltage_THD	%
3-N_voltage_HD_3rd	%
3-N_voltage_HD_5th	%
3-N_voltage_HD_7th	%
3-N_voltage_HD_9th	%
3-N_voltage_HD_11th	%
3-N_voltage_HD_13th	%
3-N_voltage_HD_15th	%
3-N_voltage_HD_17th	%
3-N_voltage_HD_19th	%
3-N_voltage_HD_21st	%
3-N_voltage_HD_23rd	%
3-N_voltage_HD_25th	%
3-N_voltage_HD_27th	%
3-N_voltage_HD_29th	%
3-N_voltage_HD_31st	%
1-H_current_Total	A
1-H_current_1st	A
1-H_current_3rd	A
1-H_current_5th	A
1-H_current_7th	A
1-H_current_9th	A
1-H_current_11th	A
1-H_current_13th	A
1-H_current_15th	A

Measured items	Unit
1-H_current_17th	A
1-H_current_19th	A
1-H_current_21st	A
1-H_current_23rd	A
1-H_current_25th	A
1-H_current_27th	A
1-H_current_29th	A
1-H_current_31th	A
1_current_THD	%
2-H_current_Total	A
2-H_current_1st	A
2-H_current_3rd	A
2-H_current_5th	A
2-H_current_7th	A
2-H_current_9th	A
2-H_current_11th	A
2-H_current_13th	A
2-H_current_15th	A
2-H_current_17th	A
2-H_current_19th	A
2-H_current_21st	A
2-H_current_23rd	A
2-H_current_25th	A
2-H_current_27th	A
2-H_current_29th	A
2-H_current_31th	A
2_current_THD	%
3-H_current_Total	A
3-H_current_1st	A
3-H_current_3rd	A
3-H_current_5th	A
3-H_current_7th	A
3-H_current_9th	A
3-H_current_11th	A
3-H_current_13th	A
3-H_current_15th	A
3-H_current_17th	A
3-H_current_19th	A
3-H_current_21st	A
3-H_current_23rd	A
3-H_current_25th	A
3-H_current_27th	A
3-H_current_29th	A
3-H_current_31th	A
3_current_THD	%
N-H_current_Total	A
N-H_current_1st	A
N-H_current_3rd	A
N-H_current_5th	A
N-H_current_7th	A
N-H_current_9th	A
N-H_current_11th	A
N-H_current_13th	A
N-H_current_15th	A
N-H_current_17th	A
N-H_current_19th	A
N-H_current_21st	A
N-H_current_23rd	A
N-H_current_25th	A
N-H_current_27th	A
N-H_current_29th	A
N-H_current_31th	A

***1 The measured items differ with the phase wire method.**
For details, refer to the instruction manual or specification sheet of the terminal.
***2 The total current is the average of 1 phase current, 2 phase current, and 3 phase current.**
***3 The total voltage (line-to-line) is the average of 1-2 voltage, 2-3 voltage, and 3-1 voltage.**
***4 The total voltage (phase) is the average of 1-N voltage, 2-N voltage, and 3-N voltage.**
***5 The demand refers to moving average.**
After step input, the operated value reaches 95% of the input value after the elapse of the preset demand time.
(Example) When the demand time = 2 minutes, an input of 100 A results in the current demand = 95 A in 2 minutes.
For the current demand to reach 100 A, about 6 minutes, about a triple, is required.
***6 Harmonic current (voltage) total = $\sqrt{\{\Sigma(\text{Harmonic current (voltage) nth})^2\}}$ (n = 2 to 20)**
***7 Harmonic current (voltage) nth content = Harmonic current (voltage) nth / Harmonic current (voltage) fundamental wave**
***8 Harmonic current (voltage) total distortion rate = Harmonic current (voltage) total / Harmonic current (voltage) fundamental wave**

5.3.15. ME96NSR

Measured items	Unit
Active energy (Import)	kWh
Active energy (Export)	kWh
Reactive energy (Import:lag)	kvarh
Reactive energy (Export:lag)	kvarh
Reactive energy (Import:lead)	kvarh
Reactive energy (Export:lead)	kvarh
Active energy (Import:exp.)	kWh
Active energy (Export:exp.)	kWh
Reactive energy (Import:lag:exp.)	kvarh
Reactive energy (Export:lag:exp.)	kvarh
Reactive energy (Import:lead:exp.)	kvarh
Reactive energy (Export:lead:exp.)	kvarh
Current; average	A
Current; phase1	A
Current; phase2	A
Current; phase3	A
Current; phaseN	A
Current demand; average	A
Current demand; phase1	A
Current demand; phase2	A
Current demand; phase3	A
Current demand; phaseN	A
Voltage; L-L; average	V
Voltage; phase1-2	V
Voltage; phase2-3	V
Voltage; phase3-1	V
Voltage; L-N; average	V
Voltage; phase1-N	V
Voltage; phase2-N	V
Voltage; phase3-N	V
Active power; total	kW
Reactive power; total	kvar
Active power; phase1	kW
Active power; phase2	kW

Measured items	Unit
Active power; phase3	kW
Reactive power; phase1	kvar
Reactive power; phase2	kvar
Reactive power; phase3	kvar
VA; total	kVA
VA; phase1	kVA
VA; phase2	kVA
VA; phase3	kVA
Power factor	%
Power factor; phase1	%
Power factor; phase2	%
Power factor; phase3	%
Frequency	Hz
HV; phase1-2 RMS total	V
HV; phase1-2 RMS 1st	V
HV; phase1-2 RMS 3rd	V
HV; phase1-2 RMS 5th	V
HV; phase1-2 RMS 7th	V
HV; phase1-2 RMS 9th	V
HV; phase1-2 RMS 11th	V
HV; phase1-2 RMS 13th	V
HV; phase1-2 D.ratio total	%
HV; phase1-2 D.ratio 3rd	%
HV; phase1-2 D.ratio 5th	%
HV; phase1-2 D.ratio 7th	%
HV; phase1-2 D.ratio 9th	%
HV; phase1-2 D.ratio 11th	%
HV; phase1-2 D.ratio 13th	%
HV; phase2-3 RMS total	V
HV; phase2-3 RMS 1st	V
HV; phase2-3 RMS 3rd	V
HV; phase2-3 RMS 5th	V
HV; phase2-3 RMS 7th	V
HV; phase2-3 RMS 9th	V

Measured items	Unit
HV; phase2-3 RMS 11th	V
HV; phase2-3 RMS 13th	V
HV; phase2-3 D.ratio total	%
HV; phase2-3 D.ratio 3rd	%
HV; phase2-3 D.ratio 5th	%
HV; phase2-3 D.ratio 7th	%
HV; phase2-3 D.ratio 9th	%
HV; phase2-3 D.ratio 11th	%
HV; phase2-3 D.ratio 13th	%
HV; phase1-N RMS total	V
HV; phase1-N RMS 1st	V
HV; phase1-N RMS 3rd	V
HV; phase1-N RMS 5th	V
HV; phase1-N RMS 7th	V
HV; phase1-N RMS 9th	V
HV; phase1-N RMS 11th	V
HV; phase1-N RMS 13th	V
HV; phase1-N D.ratio total	%
HV; phase1-N D.ratio 3rd	%
HV; phase1-N D.ratio 5th	%
HV; phase1-N D.ratio 7th	%
HV; phase1-N D.ratio 9th	%
HV; phase1-N D.ratio 11th	%
HV; phase1-N D.ratio 13th	%
HV; phase2-N RMS total	V
HV; phase2-N RMS 1st	V
HV; phase2-N RMS 3rd	V
HV; phase2-N RMS 5th	V
HV; phase2-N RMS 7th	V
HV; phase2-N RMS 9th	V
HV; phase2-N RMS 11th	V
HV; phase2-N RMS 13th	V
HV; phase2-N D.ratio total	%
HV; phase2-N D.ratio 3rd	%
HV; phase2-N D.ratio 5th	%
HV; phase2-N D.ratio 7th	%
HV; phase2-N D.ratio 9th	%
HV; phase2-N D.ratio 11th	%
HV; phase2-N D.ratio 13th	%
HV; phase3-N RMS total	V
HV; phase3-N RMS 1st	V
HV; phase3-N RMS 3rd	V
HV; phase3-N RMS 5th	V
HV; phase3-N RMS 7th	V
HV; phase3-N RMS 9th	V
HV; phase3-N RMS 11th	V
HV; phase3-N RMS 13th	V
HV; phase3-N D.ratio total	%
HV; phase3-N D.ratio 3rd	%
HV; phase3-N D.ratio 5th	%
HV; phase3-N D.ratio 7th	%
HV; phase3-N D.ratio 9th	%
HV; phase3-N D.ratio 11th	%
HV; phase3-N D.ratio 13th	%
HV; L-L D.ratio total	%
HV; L-L 1st	V
HV; L-L D.ratio 3rd	%
HV; L-L D.ratio 5th	%
HV; L-L D.ratio 7th	%
HV; L-L D.ratio 9th	%
HV; L-L D.ratio 11th	%
HV; L-L D.ratio 13th	%
HA; phase1 RMS total	A
HA; phase1 RMS 1st	A
HA; phase1 RMS 3rd	A
HA; phase1 RMS 5th	A

Measured items	Unit
HA; phase1 RMS 7th	A
HA; phase1 RMS 9th	A
HA; phase1 RMS 11th	A
HA; phase1 RMS 13th	A
HA; phase1 D.ratio total	%
HA; phase1 D.ratio 3rd	%
HA; phase1 D.ratio 5th	%
HA; phase1 D.ratio 7th	%
HA; phase1 D.ratio 9th	%
HA; phase1 D.ratio 11th	%
HA; phase1 D.ratio 13th	%
HA; phase2 RMS total	A
HA; phase2 RMS 1st	A
HA; phase2 RMS 3rd	A
HA; phase2 RMS 5th	A
HA; phase2 RMS 7th	A
HA; phase2 RMS 9th	A
HA; phase2 RMS 11th	A
HA; phase2 RMS 13th	A
HA; phase2 D.ratio total	%
HA; phase2 D.ratio 3rd	%
HA; phase2 D.ratio 5th	%
HA; phase2 D.ratio 7th	%
HA; phase2 D.ratio 9th	%
HA; phase2 D.ratio 11th	%
HA; phase2 D.ratio 13th	%
HA; phase3 RMS total	A
HA; phase3 RMS 1st	A
HA; phase3 RMS 3rd	A
HA; phase3 RMS 5th	A
HA; phase3 RMS 7th	A
HA; phase3 RMS 9th	A
HA; phase3 RMS 11th	A
HA; phase3 RMS 13th	A
HA; phase3 D.ratio total	%
HA; phase3 D.ratio 3rd	%
HA; phase3 D.ratio 5th	%
HA; phase3 D.ratio 7th	%
HA; phase3 D.ratio 9th	%
HA; phase3 D.ratio 11th	%
HA; phase3 D.ratio 13th	%
HA; phaseN RMS total	A
HA; phaseN RMS 1st	A
HA; phaseN RMS 3rd	A
HA; phaseN RMS 5th	A
HA; phaseN RMS 7th	A
HA; phaseN RMS 9th	A
HA; phaseN RMS 11th	A
HA; phaseN RMS 13th	A
HA; phaseN D.ratio total	%
HA; phaseN D.ratio 3rd	%
HA; phaseN D.ratio 5th	%
HA; phaseN D.ratio 7th	%
HA; phaseN D.ratio 9th	%
HA; phaseN D.ratio 11th	%
HA; phaseN D.ratio 13th	%

***1 The measured items differ with the phase wire method.**
For details, refer to the instruction manual or specification sheet of the terminal.
***2 The total current is the average of 1 phase current, 2 phase current, and 3 phase current.**
***3 The total voltage (line-to-line) is the average of 1-2 voltage, 2-3 voltage, and 3-1 voltage.**
***4 The total voltage (phase) is the average of 1-N voltage, 2-N voltage, and 3-N voltage.**
***5 The demand refers to moving average.**
After step input, the operated value reaches 95% of the input value after the elapse of the preset demand time.
(Example) When the demand time = 2 minutes, an input of 100 A results in the current demand = 95 A in 2 minutes.
For the current demand to reach 100 A, about 6 minutes, about a triple, is required.
***6 Harmonic current (voltage) total = $\sqrt{\{\Sigma(\text{Harmonic current (voltage) nth})^2\}}$ (n = 2 to 20)**
***7 Harmonic current (voltage) nth content = Harmonic current (voltage) nth / Harmonic current (voltage) fundamental wave**
***8 Harmonic current (voltage) total distortion rate = Harmonic current (voltage) total / Harmonic current (voltage) fundamental wave**

5.3.16. ME110SSR-C(H) (1P2W, 1P3W, 3P3W)

Measured items	Unit
Active energy (Import)	kWh
Active energy (Export)	kWh
Reactive energy (Import:lag)	kvarh
Reactive energy (Export:lag)	kvarh
Reactive energy (Import:lead)	kvarh
Reactive energy (Export:lead)	kvarh
Current; phase1	A
Current; phase2	A
Current; phase3	A
Voltage; phase1-2	V
Voltage; phase2-3	V
Voltage; phase3-1	V
Active power	kW
Reactive power	kvar
Power factor	%
Frequency	Hz
Current demand; phase1	A
Current demand; phase2	A
Current demand; phase3	A
Electric power demand	kW
HA; phase1 RMS total	A
HA; phase1 RMS 1st	A
HA; phase1 RMS 3rd	A
HA; phase1 RMS 5th	A
HA; phase1 RMS 7th	A
HA; phase1 RMS 9th	A
HA; phase1 RMS 11th	A
HA; phase1 RMS 13th	A
HA; phase3 RMS total	A
HA; phase3 RMS 1st	A
HA; phase3 RMS 3rd	A
HA; phase3 RMS 5th	A
HA; phase3 RMS 7th	A
HA; phase3 RMS 9th	A
HA; phase3 RMS 11th	A
HA; phase3 RMS 13th	A
HA; phase1 D.ratio total	%
HA; phase1 D.ratio 3rd	%
HA; phase1 D.ratio 5th	%
HA; phase1 D.ratio 7th	%
HA; phase1 D.ratio 9th	%

Measured items	Unit
HA; phase1 D.ratio 11th	%
HA; phase1 D.ratio 13th	%
HA; phase3 D.ratio total	%
HA; phase3 D.ratio 3rd	%
HA; phase3 D.ratio 5th	%
HA; phase3 D.ratio 7th	%
HA; phase3 D.ratio 9th	%
HA; phase3 D.ratio 11th	%
HA; phase3 D.ratio 13th	%
HV; phase1-2 RMS total	V
HV; phase1-2 RMS 1st	V
HV; phase1-2 RMS 3rd	V
HV; phase1-2 RMS 5th	V
HV; phase1-2 RMS 7th	V
HV; phase1-2 RMS 9th	V
HV; phase1-2 RMS 11th	V
HV; phase1-2 RMS 13th	V
HV; phase2-3 RMS total	V
HV; phase2-3 RMS 1st	V
HV; phase2-3 RMS 3rd	V
HV; phase2-3 RMS 5th	V
HV; phase2-3 RMS 7th	V
HV; phase2-3 RMS 9th	V
HV; phase2-3 RMS 11th	V
HV; phase2-3 RMS 13th	V
HV; phase1-2 D.ratio total	%
HV; phase1-2 D.ratio 3rd	%
HV; phase1-2 D.ratio 5th	%
HV; phase1-2 D.ratio 7th	%
HV; phase1-2 D.ratio 9th	%
HV; phase1-2 D.ratio 11th	%
HV; phase1-2 D.ratio 13th	%
HV; phase2-3 D.ratio total	%
HV; phase2-3 D.ratio 3rd	%
HV; phase2-3 D.ratio 5th	%
HV; phase2-3 D.ratio 7th	%
HV; phase2-3 D.ratio 9th	%
HV; phase2-3 D.ratio 11th	%
HV; phase2-3 D.ratio 13th	%

***1 The total current is the average of R phase current, S phase current, and T phase current.**

***2 The total voltage (line-to-line) is the average of R-S voltage, S-T voltage, and T-R voltage.**

***3 The demand refers to moving average.**
After step input, the operated value reaches 95% of the input value after the elapse of the preset demand time.
(Example) When the demand time = 2 minutes, an input of 100 A results in the current demand = 95 A in 2 minutes.
For the current demand to reach 100 A, about 6 minutes, about a triple, is required.

***4 Harmonic current (voltage) total = $\sqrt{\{\Sigma(\text{Harmonic current (voltage) nth})^2\}}$ (n = 2 to 20)**

***5 Harmonic current (voltage) nth content = Harmonic current (voltage) nth / Harmonic current (voltage) fundamental wave**

***6 Harmonic current (voltage) total distortion rate = Harmonic current (voltage) total / Harmonic current (voltage) fundamental wave**

5.3.17. ME110SSR-C(H) (3P4W)

Measured items	Unit
Active energy (Import)	kWh
Active energy (Export)	kWh
Reactive energy (Import:lag)	kvarh
Reactive energy (Export:lag)	kvarh
Reactive energy (Import:lead)	kvarh
Reactive energy (Export:lead)	kvarh
Current; phase1	A
Current; phase2	A
Current; phase3	A
Current; phaseN	A
Current; average	A
Voltage; phase1-2	V
Voltage; phase2-3	V
Voltage; phase3-1	V
Voltage; L-L; average	V
Voltage; phase1-N	V
Voltage; phase2-N	V
Voltage; phase3-N	V
Voltage; L-N; average	V
Active power	kW
Reactive power	kvar
Power factor	%
Frequency	Hz
Current demand; phase1	A
Current demand; phase2	A
Current demand; phase3	A
Current demand; phaseN	A
Current demand; average	A
Electric power demand	kW
HA; phase1 RMS total	A
HA; phase1 RMS 1st	A
HA; phase1 RMS 3rd	A
HA; phase1 RMS 5th	A
HA; phase1 RMS 7th	A
HA; phase1 RMS 9th	A
HA; phase1 RMS 11th	A
HA; phase1 RMS 13th	A
HA; phase2 RMS total	A
HA; phase2 RMS 1st	A
HA; phase2 RMS 3rd	A
HA; phase2 RMS 5th	A
HA; phase2 RMS 7th	A
HA; phase2 RMS 9th	A
HA; phase2 RMS 11th	A
HA; phase2 RMS 13th	A
HA; phase3 RMS total	A
HA; phase3 RMS 1st	A
HA; phase3 RMS 3rd	A
HA; phase3 RMS 5th	A
HA; phase3 RMS 7th	A
HA; phase3 RMS 9th	A
HA; phase3 RMS 11th	A
HA; phase3 RMS 13th	A
HA; phaseN RMS total	A
HA; phaseN RMS 1st	A
HA; phaseN RMS 3rd	A
HA; phaseN RMS 5th	A
HA; phaseN RMS 7th	A
HA; phaseN RMS 9th	A
HA; phaseN RMS 11th	A
HA; phaseN RMS 13th	A

Measured items	Unit
HA; phase1 D.ratio total	%
HA; phase1 D.ratio 3rd	%
HA; phase1 D.ratio 5th	%
HA; phase1 D.ratio 7th	%
HA; phase1 D.ratio 9th	%
HA; phase1 D.ratio 11th	%
HA; phase1 D.ratio 13th	%
HA; phase2 D.ratio total	%
HA; phase3 D.ratio total	%
HA; phase3 D.ratio 3rd	%
HA; phase3 D.ratio 5th	%
HA; phase3 D.ratio 7th	%
HA; phase3 D.ratio 9th	%
HA; phase3 D.ratio 11th	%
HA; phase3 D.ratio 13th	%
HA; phaseN D.ratio total	%
HV; phase1-2 RMS total	V
HV; phase1-2 RMS 1st	V
HV; phase1-2 RMS 3rd	V
HV; phase1-2 RMS 5th	V
HV; phase1-2 RMS 7th	V
HV; phase1-2 RMS 9th	V
HV; phase1-2 RMS 11th	V
HV; phase1-2 RMS 13th	V
HV; phase2-3 RMS total	V
HV; phase2-3 RMS 1st	V
HV; phase2-3 RMS 3rd	V
HV; phase2-3 RMS 5th	V
HV; phase2-3 RMS 7th	V
HV; phase2-3 RMS 9th	V
HV; phase2-3 RMS 11th	V
HV; phase2-3 RMS 13th	V
HV; phase1-2 D.ratio total	%
HV; phase1-2 D.ratio 3rd	%
HV; phase1-2 D.ratio 5th	%
HV; phase1-2 D.ratio 7th	%
HV; phase1-2 D.ratio 9th	%
HV; phase1-2 D.ratio 11th	%
HV; phase1-2 D.ratio 13th	%
HV; phase2-3 D.ratio total	%
HV; phase2-3 D.ratio 3rd	%
HV; phase2-3 D.ratio 5th	%
HV; phase2-3 D.ratio 7th	%
HV; phase2-3 D.ratio 9th	%
HV; phase2-3 D.ratio 11th	%
HV; phase2-3 D.ratio 13th	%
HV; phase1-N RMS total	V
HV; phase1-N RMS 1st	V
HV; phase2-N RMS total	V
HV; phase2-N RMS 1st	V
HV; phase3-N RMS total	V
HV; phase3-N RMS 1st	V
HV; phase1-N D.ratio total	%
HV; phase1-N D.ratio 3rd	%
HV; phase1-N D.ratio 5th	%
HV; phase1-N D.ratio 7th	%
HV; phase1-N D.ratio 9th	%
HV; phase1-N D.ratio 11th	%
HV; phase1-N D.ratio 13th	%
HV; phase2-N D.ratio total	%
HV; phase2-N D.ratio 3rd	%

Measured items	Unit
HV; phase2-N D.ratio 5th	%
HV; phase2-N D.ratio 7th	%
HV; phase2-N D.ratio 9th	%
HV; phase2-N D.ratio 11th	%
HV; phase2-N D.ratio 13th	%
HV; phase3-N D.ratio total	%
HV; phase3-N D.ratio 3rd	%

Measured items	Unit
HV; phase3-N D.ratio 5th	%
HV; phase3-N D.ratio 7th	%
HV; phase3-N D.ratio 9th	%
HV; phase3-N D.ratio 11th	%
HV; phase3-N D.ratio 13th	%

***1 The measured items differ with the phase wire method.**
For details, refer to the instruction manual or specification sheet of the terminal.
***2 The total current is the average of R phase current, S phase current, and T phase current.**
***3 The total voltage (line-to-line) is the average of R-S voltage, S-T voltage, and T-R voltage.**
***4 The total voltage (phase) is the average of R-N voltage, S-N voltage, and T-N voltage.**
***5 The demand refers to moving average.**
After step input, the operated value reaches 95% of the input value after the elapse of the preset demand time.
(Example) When the demand time = 2 minutes, an input of 100 A results in the current demand = 95 A in 2 minutes.
For the current demand to reach 100 A, about 6 minutes, about a triple, is required.
***6 Harmonic current (voltage) total = $\sqrt{\{\Sigma(\text{Harmonic current (voltage) nth})^2\}}$ (n = 2 to 20)**
***7 Harmonic current (voltage) nth content = Harmonic current (voltage) nth / Harmonic current (voltage) fundamental wave**
***8 Harmonic current (voltage) total distortion rate = Harmonic current (voltage) total / Harmonic current (voltage) fundamental wave**

5.3.18. ME110NSR-C

Measured items	Unit
Active energy (Import)	kWh
Active energy (Export)	kWh
Reactive energy (Import:lag)	kvarh
Reactive energy (Export:lag)	kvarh
Reactive energy (Import:lead)	kvarh
Reactive energy (Export:lead)	kvarh
Current; phase1	A
Current; phase2	A
Current; phase3	A
Current; phaseN	A
Current; average	A
Voltage; phase1-2	V
Voltage; phase2-3	V
Voltage; phase3-1	V
Voltage; L-L; average	V
Voltage; phase1-N	V
Voltage; phase2-N	V
Voltage; phase3-N	V
Voltage; L-N; average	V
Active power	kW
Reactive power	kvar
Power factor	%
Frequency	Hz
Current demand; phase1	A
Current demand; phase2	A
Current demand; phase3	A
Current demand; phaseN	A
Current demand; average	A
Electric power demand	kW
HA; phase1 RMS total	A
HA; phase1 RMS 1st	A
HA; phase1 RMS 3rd	A
HA; phase1 RMS 5th	A
HA; phase1 RMS 7th	A
HA; phase1 RMS 9th	A
HA; phase1 RMS 11th	A
HA; phase1 RMS 13th	A
HA; phase2 RMS total	A
HA; phase2 RMS 1st	A
HA; phase2 RMS 3rd	A
HA; phase2 RMS 5th	A
HA; phase2 RMS 7th	A
HA; phase2 RMS 9th	A
HA; phase2 RMS 11th	A
HA; phase2 RMS 13th	A
HA; phase3 RMS total	A
HA; phase3 RMS 1st	A
HA; phase3 RMS 3rd	A
HA; phase3 RMS 5th	A
HA; phase3 RMS 7th	A
HA; phase3 RMS 9th	A
HA; phase3 RMS 11th	A
HA; phase3 RMS 13th	A
HA; phaseN RMS total	A
HA; phaseN RMS 1st	A
HA; phaseN RMS 3rd	A
HA; phaseN RMS 5th	A
HA; phaseN RMS 7th	A
HA; phaseN RMS 9th	A
HA; phaseN RMS 11th	A
HA; phaseN RMS 13th	A

Measured items	Unit
HA; phase1 D.ratio total	%
HA; phase1 D.ratio 3rd	%
HA; phase1 D.ratio 5th	%
HA; phase1 D.ratio 7th	%
HA; phase1 D.ratio 9th	%
HA; phase1 D.ratio 11th	%
HA; phase1 D.ratio 13th	%
HA; phase2 D.ratio total	%
HA; phase3 D.ratio total	%
HA; phase3 D.ratio 3rd	%
HA; phase3 D.ratio 5th	%
HA; phase3 D.ratio 7th	%
HA; phase3 D.ratio 9th	%
HA; phase3 D.ratio 11th	%
HA; phase3 D.ratio 13th	%
HA; phaseN D.ratio total	%
HV; phase1-2 RMS total	V
HV; phase1-2 RMS 1st	V
HV; phase1-2 RMS 3rd	V
HV; phase1-2 RMS 5th	V
HV; phase1-2 RMS 7th	V
HV; phase1-2 RMS 9th	V
HV; phase1-2 RMS 11th	V
HV; phase1-2 RMS 13th	V
HV; phase2-3 RMS total	V
HV; phase2-3 RMS 1st	V
HV; phase2-3 RMS 3rd	V
HV; phase2-3 RMS 5th	V
HV; phase2-3 RMS 7th	V
HV; phase2-3 RMS 9th	V
HV; phase2-3 RMS 11th	V
HV; phase2-3 RMS 13th	V
HV; phase1-2 D.ratio total	%
HV; phase1-2 D.ratio 3rd	%
HV; phase1-2 D.ratio 5th	%
HV; phase1-2 D.ratio 7th	%
HV; phase1-2 D.ratio 9th	%
HV; phase1-2 D.ratio 11th	%
HV; phase1-2 D.ratio 13th	%
HV; phase2-3 D.ratio total	%
HV; phase2-3 D.ratio 3rd	%
HV; phase2-3 D.ratio 5th	%
HV; phase2-3 D.ratio 7th	%
HV; phase2-3 D.ratio 9th	%
HV; phase2-3 D.ratio 11th	%
HV; phase2-3 D.ratio 13th	%
HV; phase1-N RMS total	V
HV; phase1-N RMS 1st	V
HV; phase2-N RMS total	V
HV; phase2-N RMS 1st	V
HV; phase3-N RMS total	V
HV; phase3-N RMS 1st	V
HV; phase1-N D.ratio total	%
HV; phase1-N D.ratio 3rd	%
HV; phase1-N D.ratio 5th	%
HV; phase1-N D.ratio 7th	%
HV; phase1-N D.ratio 9th	%
HV; phase1-N D.ratio 11th	%
HV; phase1-N D.ratio 13th	%
HV; phase2-N D.ratio total	%
HV; phase2-N D.ratio 3rd	%

Measured items	Unit
HV; phase2-N D.ratio 5th	%
HV; phase2-N D.ratio 7th	%
HV; phase2-N D.ratio 9th	%
HV; phase2-N D.ratio 11th	%
HV; phase2-N D.ratio 13th	%
HV; phase3-N D.ratio total	%
HV; phase3-N D.ratio 3rd	%

Measured items	Unit
HV; phase3-N D.ratio 5th	%
HV; phase3-N D.ratio 7th	%
HV; phase3-N D.ratio 9th	%
HV; phase3-N D.ratio 11th	%
HV; phase3-N D.ratio 13th	%

***1 The measured items differ with the phase wire method.**
For details, refer to the instruction manual or specification sheet of the terminal.
***2 The total current is the average of R phase current, S phase current, and T phase current.**
***3 The total voltage (line-to-line) is the average of R-S voltage, S-T voltage, and T-R voltage.**
***4 The total voltage (phase) is the average of R-N voltage, S-N voltage, and T-N voltage.**
***5 The demand refers to moving average.**
After step input, the operated value reaches 95% of the input value after the elapse of the preset demand time.
(Example) When the demand time = 2 minutes, an input of 100 A results in the current demand = 95 A in 2 minutes.
For the current demand to reach 100 A, about 6 minutes, about a triple, is required.
***6 Harmonic current (voltage) total = $\sqrt{\{\Sigma(\text{Harmonic current (voltage) nth})^2\}}$ (n = 2 to 20)**
***7 Harmonic current (voltage) nth content = Harmonic current (voltage) nth / Harmonic current (voltage) fundamental wave**
***8 Harmonic current (voltage) total distortion rate = Harmonic current (voltage) total / Harmonic current (voltage) fundamental wave**

5.3.19. AJ65BT-68TD

Measured items	Unit
Ch1 temperature	°C
Ch2 temperature	°C
Ch3 temperature	°C
Ch4 temperature	°C

Measured items	Unit
Ch5 temperature	°C
Ch6 temperature	°C
Ch7 temperature	°C
Ch8 temperature	°C

***1 The number of digits after the decimal point is fixed at 1.**
***2 The type of thermocouple is selected from "K", "E", "J", "T", "B", "R", and "S".**

5.3.20. AJ65BT-64RD3

Measured items	Unit
Ch1 temperature	°C
Ch2 temperature	°C
Ch3 temperature	°C
Ch4 temperature	°C

***1 The number of digits after the decimal point is selected from "integer", "1 digit", "2 digits", and "3 digits".**

5.3.21. AJ65BT-64AD

Measured items	Unit
Ch1 analog value	<Setting>*1
Ch2 analog value	<Setting>*1
Ch3 analog value	<Setting>*1
Ch4 analog value	<Setting>*1

***1 Arbitrary characters (a maximum of 8 characters) can be set as the unit.**
***2 The range of input is selected from "0 to 20mA", "4 to 20mA", "0 to 5V", "1 to 5V", "-5 to 5V", "-10 to 10V", and "-20 to 20mV".**
***3 For the scale, -99999 to 999999 (6 digits including signs and the decimal point, up to 3 places after the decimal point) can be set.**
***4 When power factor is selected, the power factor indication is selected from "-0% to 100% to 0%" and "-50% to 100% to 50%".**
***5 The number of digits after the decimal point is selected from "integer", "1 digit", "2 digits", and "3 digits".**

5.3.22. AJ65SBTB1-8D

Measured items	Unit
Ch1 digital input value	<Setting>*1
Ch2 digital input value	<Setting>*1
Ch3 digital input value	<Setting>*1
Ch4 digital input value	<Setting>*1

Measured items	Unit
Ch5 digital input value	<Setting>*1
Ch6 digital input value	<Setting>*1
Ch7 digital input value	<Setting>*1
Ch8 digital input value	<Setting>*1

***1 The unit setting is arbitrary.**
When the unit is set, arbitrary characters (a maximum of 8 characters) can be set.
***2 This terminal is used for a measuring point of operation monitoring.**

5.3.23. AJ65SBTB1-16D

Measured items	Unit
Ch1 digital input value	<Setting>*1
Ch2 digital input value	<Setting>*1
Ch3 digital input value	<Setting>*1
Ch4 digital input value	<Setting>*1
Ch5 digital input value	<Setting>*1
Ch6 digital input value	<Setting>*1
Ch7 digital input value	<Setting>*1
Ch8 digital input value	<Setting>*1

Measured items	Unit
Ch9 digital input value	<Setting>*1
Ch10 digital input value	<Setting>*1
Ch11 digital input value	<Setting>*1
Ch12 digital input value	<Setting>*1
Ch13 digital input value	<Setting>*1
Ch14 digital input value	<Setting>*1
Ch15 digital input value	<Setting>*1
Ch16 digital input value	<Setting>*1

***1 The unit setting is arbitrary.**
When the unit is set, arbitrary characters (a maximum of 8 characters) can be set.
***2 This terminal is used for a measuring point of operation monitoring.**

5.3.24. AJ65SBTB1-32D

Measured items	Unit
Ch1 digital input value	<Setting>*1
Ch2 digital input value	<Setting>*1
Ch3 digital input value	<Setting>*1
Ch4 digital input value	<Setting>*1
Ch5 digital input value	<Setting>*1
Ch6 digital input value	<Setting>*1
Ch7 digital input value	<Setting>*1
Ch8 digital input value	<Setting>*1
Ch9 digital input value	<Setting>*1
Ch10 digital input value	<Setting>*1
Ch11 digital input value	<Setting>*1
Ch12 digital input value	<Setting>*1
Ch13 digital input value	<Setting>*1
Ch14 digital input value	<Setting>*1
Ch15 digital input value	<Setting>*1
Ch16 digital input value	<Setting>*1

Measured items	Unit
Ch17 digital input value	<Setting>*1
Ch18 digital input value	<Setting>*1
Ch19 digital input value	<Setting>*1
Ch20 digital input value	<Setting>*1
Ch21 digital input value	<Setting>*1
Ch22 digital input value	<Setting>*1
Ch23 digital input value	<Setting>*1
Ch24 digital input value	<Setting>*1
Ch25 digital input value	<Setting>*1
Ch26 digital input value	<Setting>*1
Ch27 digital input value	<Setting>*1
Ch28 digital input value	<Setting>*1
Ch29 digital input value	<Setting>*1
Ch30 digital input value	<Setting>*1
Ch31 digital input value	<Setting>*1
Ch32 digital input value	<Setting>*1

***1 The unit setting is arbitrary.**
When the unit is set, arbitrary characters (a maximum of 8 characters) can be set.
***2 This terminal is used for a measuring point of operation monitoring.**

5.3.25. AJ65SBTB1-16DT

Measured items	Unit
Ch1 digital input value	<Setting>*1
Ch2 digital input value	<Setting>*1
Ch3 digital input value	<Setting>*1
Ch4 digital input value	<Setting>*1

Measured items	Unit
Ch5 digital input value	<Setting>*1
Ch6 digital input value	<Setting>*1
Ch7 digital input value	<Setting>*1
Ch8 digital input value	<Setting>*1

***1 The unit setting is arbitrary.**
When the unit is set, arbitrary characters (a maximum of 8 characters) can be set.
***2 Output cannot be used.**
***3 This terminal is used for a measuring point of operation monitoring.**

5.3.26. AJ65SBTB1-32DT

Measured items	Unit
Ch1 digital input value	<Setting>*1
Ch2 digital input value	<Setting>*1
Ch3 digital input value	<Setting>*1
Ch4 digital input value	<Setting>*1
Ch5 digital input value	<Setting>*1
Ch6 digital input value	<Setting>*1
Ch7 digital input value	<Setting>*1
Ch8 digital input value	<Setting>*1

Measured items	Unit
Ch9 digital input value	<Setting>*1
Ch10 digital input value	<Setting>*1
Ch11 digital input value	<Setting>*1
Ch12 digital input value	<Setting>*1
Ch13 digital input value	<Setting>*1
Ch14 digital input value	<Setting>*1
Ch15 digital input value	<Setting>*1
Ch16 digital input value	<Setting>*1

***1 The unit setting is arbitrary.**
When the unit is set, arbitrary characters (a maximum of 8 characters) can be set.
***2 Output cannot be used.**
***3 This terminal is used for a measuring point of operation monitoring.**

5.4. List of measured items of devices

The following describes the measured items QCPU devices and GOT supported by EcoWebServerIII.

5.4.1. Bit data

(a) Range of accessible devices for commands common to high-performance model QCPU, process CPU, dual CPU, universal model QCPU, and LCPU

Measured items		Device No.
Input	X	X000000 to X001FFF
Output	Y	Y000000 to Y001FFF
Internal relay	M	M000000 to M008191
Latch relay	L	L000000 to L008191
Step relay	S	S000000 to S008191
Link relay	B	B000000 to B001FFF
Annunciator	F	F000000 to F002047
Special relay	-	-
Timer(Contact)	T	TS00000 to TS02047
Timer(Coil)	T	TC00000 to TC02047
Counter(Contact)	C	CS00000 to CS01023
Counter(Coil)	C	CC00000 to CC01023

(b) Range of accessible devices for commands common to basic model QCPU

Measured items		Device No.
Input	X	X000000 to X0007FF
Output	Y	Y000000 to Y0007FF
Internal relay	M	M000000 to M008191
Latch relay	L	L000000 to L002047
Step relay	S	S000000 to S002047
Link relay	B	B000000 to B0007FF
Annunciator	F	F000000 to F001023
Special relay	-	-
Timer(Contact)	T	TS00000 to TS00511
Timer(Coil)	T	TC00000 to TC00511
Counter(Contact)	C	CS00000 to CS00511
Counter(Coil)	C	CC00000 to CC00511

(c) Range of accessible devices for commands common to QnACPU

Measured items		Device No.
Input	X	X000000 to X001FFF
Output	Y	Y000000 to Y001FFF
Internal relay	M	M000000 to M008191
Latch relay	L	L000000 to L008191
Step relay	S	S000000 to S008191
Link relay	B	B000000 to B001FFF
Annunciator	F	F000000 to F002047
Special relay	M	M009000 to M009255
Timer(Contact)	T	TS00000 to TS02047
Timer(Coil)	T	TC00000 to TC02047
Counter(Contact)	C	CS00000 to CS01023
Counter(Coil)	C	CC00000 to CC01023

***1 This terminal is used for a measuring point of operation monitoring.**

(d) Range of accessible devices for commands common to ACPU

Measured items		Device No.
Input	X	X0000 to X07FF
Output	Y	Y0000 to Y07FF
Internal relay	M	M0000 to M2047
Latch relay	L	L0000 to L2047
Step relay	S	S0000 to S2047
Link relay	B	B0000 to B07FF
Annunciator	F	F0000 to F0255
Special relay	M	M9000 to M9255
Timer(Contact)	T	TS000 to TS255
Timer(Coil)	T	TC000 to TC255
Counter(Contact)	C	CS000 to CS255
Counter(Coil)	C	CC000 to CC255

(e) Range of accessible devices for commands common to AnA/AnUCPU

Measured items		Device No.
Input	X	X000000 to X001FFF
Output	Y	Y000000 to Y001FFF
Internal relay	M	M000000 to M008191
Latch relay	L	L000000 to L008191
Step relay	S	S000000 to S008191
Link relay	B	B000000 to B001FFF
Annunciator	F	F000000 to F002047
Special relay	M	M009000 to M009255
Timer(Contact)	T	TS00000 to TS02047
Timer(Coil)	T	TC00000 to TC02047
Counter(Contact)	C	CS00000 to CS01023
Counter(Coil)	C	CC00000 to CC01023

(f) Range of accessible devices for commands common to FXCPU

Measured items		Device No.
Input	X	X0000 to X0377
Output	Y	Y0000 to Y0377
Internal relay	M	M0000 to M7679
Step relay	S	S0000 to S4095
Special relay	M	M8000 to M8511
Timer(Contact)	T	TS000 to TS511
Counter(Contact)	C	CS000 to CS255

(g) Range of accessible devices for commands common to GT27, GT16, GT15, GT14

Measured items		Device No.
Virtual device	L	L0000 to L2047
Virtual device	M	M0000 to M2047

5.4.2. Word data

(a) Range of accessible devices for commands common to high-performance model QCPU, process CPU, dual CPU, universal model QCPU and LCPU

Measured items		Device No.
Timer(Current value)	T	TN00000 to TN02047
Counter(Current value)	C	CN00000 to CN01023
Data register	D	D000000 to D008191
Link register	W	W000000 to W001FFF
File register	R	R000000 to R008191
Special register	-	-

(b) Range of accessible devices for commands common to basic model QCPU

Measured items		Device No.
Timer(Current value)	T	TN00000 to TN00511
Counter(Current value)	C	CN00000 to CN00511
Data register	D	D000000 to D008191
Link register	W	W000000 to W0007FF
File register	R	R000000 to R008191
Special register	-	-

(c) Range of accessible devices for commands common to QnACPU

Measured items		Device No.
Timer(Current value)	T	TN00000 to TN02047
Counter(Current value)	C	CN00000 to CN01023
Data register	D	D000000 to D008191
Link register	W	W000000 to W001FFF
File register	R	R000000 to R008191
Special register	D	D009000 to D009255

(d) Range of accessible devices for commands common to ACPU

Measured items		Device No.
Timer(Current value)	T	TN000 to TN255
Counter(Current value)	C	CN000 to CN255
Data register	D	D0000 to D1023
Link register	W	W0000 to W03FF
File register	R	R0000 to R8191
Special register	D	D9000 to D9255

(e) Range of accessible devices for commands common to AnA/AnUCPU

Measured items		Device No.
Timer(Current value)	T	TN00000 to TN02047
Counter(Current value)	C	CN00000 to CN01023
Data register	D	D000000 to D008191
Link register	W	W000000 to W001FFF
File register	R	R000000 to R008191
Special register	D	D009000 to D009255

(f) Range of accessible devices for commands common to FXCPU

Measured items		Device No.
Timer(Current value)	T	TN000 to TN511
Counter(Current value)	C	CN000 to CN255
Data register	D	D0000 to D7999
Expanded register	R	R0000 to R9999
Special register	D	D8000 to D8511

(g) Range of accessible devices for commands common to GT27, GT16, GT15, GT14

Measured items		Device No.
Virtual device	D	D0000 to D4095
Virtual device	R	R0000 to R4095

***1 The device number varies with the sequencer CPU.**
For details, refer to the instruction manual or specification sheet of the sequencer or the CC-Link master/local unit.
***2 The MSB is a sign bit, and thus two's complement notation is used.**
***3 Arbitrary characters (a maximum of 8 characters) can be set as the unit.**
***4 For the multiplier, 0.001 to 99999 can be set.**
***5 Resister value * multiplying factor is do not exceed the 99999999999 (11digits).**
***6 Max intergration in 1 month is 9…99(10^n-1).**

5.4.3. Long data

(a) Range of accessible devices for commands common to high-performance model QCPU, process CPU, dual CPU, universal model QCPU and LCPU

Measured items		Device No.
Timer(Current value)	T	TN00000 to TN02046
Counter(Current value)	C	CN00000 to CN01022
Data register	D	D000000 to D008190
Link register	W	W000000 to W001FFE
File register	R	R000000 to R008190
Special register	-	-

(b) Range of accessible devices for commands common to basic model QCPU

Measured items		Device No.
Timer(Current value)	T	TN00000 to TN00510
Counter(Current value)	C	CN00000 to CN00510
Data register	D	D000000 to D008190
Link register	W	W000000 to W0007FE
File register	R	R000000 to R008190
Special register	-	-

(c) Range of accessible devices for commands common to QnACPU

Measured items		Device No.
Timer(Current value)	T	TN00000 to TN02046
Counter(Current value)	C	CN00000 to CN01022
Data register	D	D000000 to D008190
Link register	W	W000000 to W001FFE
File register	R	R000000 to R008190
Special register	D	D009000 to D009254

(d) Range of accessible devices for commands common to ACPU

Measured items		Device No.
Timer(Current value)	T	TN00000 to TN02046
Counter(Current value)	C	CN00000 to CN01022
Data register	D	D000000 to D008190
Link register	W	W000000 to W001FFE
File register	R	R000000 to R008190
Special register	D	D009000 to D009254

(e) Range of accessible devices for commands common to AnA/AnUCPU

Measured items		Device No.
Timer(Current value)	T	TN00000 to TN02046
Counter(Current value)	C	CN00000 to CN01022
Data register	D	D000000 to D008190
Link register	W	W000000 to W001FFE
File register	R	R000000 to R008190
Special register	D	D009000 to D009254

(f) Range of accessible devices for commands common to FXCPU

Measured items		Device No.
Timer(Current value)	T	TN000 toTN510
Counter(Current value)	C	CN000 to CN254
Data register	D	D0000 toD7998
Expanded resister	R	R0000 to R9998
Special register	D	D8000 toD8510

(g) Range of accessible devices for commands common to GT27, GT16, GT15, GT14

Measured items		Device No.
Virtual device	D	D0000 to D4094
Virtual device	R	R0000 to R4094

***1 The device number varies with the sequencer CPU.**
For details, refer to the instruction manual or specification sheet of the sequencer or the CC-Link master/local unit.

***2 Data of double word (2 device No. for 1 data).**
Last device No. is first device No. +1.

***3 First word is being used as symbol (a multiple of 2).**

***4 Arbitrary characters (a maximum of 8 characters) can be set as the unit.**

***5 For the multiplier, 0.00001 to 1 (Up to 5 decimal places) can be set.**

***6 Resister value * multiplying factor is do not exceed the 99999999999 (11digits).**

***7 Max intergration in 1 month is 9…99(10^n-1).**

5.5. PLC Setting

The following describes PLC settings to communicate with by Ethernet (CH2).
*FX series PLC is only supported for serial communication by using Ethernet/Serial transfer.

5.5.1. Communicate with EcoWebServerIII by Ethernet (CH2)

(a)For Ethernet interface unit
GX Works2/GX Developer settings for Ethernet interface unit.

Item			Contents
Operation settings			
	Communication code		ASCII
	Default settings		Always OPEN wait (possible to communicate by STOP)
	IP address		Access by EcoWebServerIII
	Write in when Run		Allow
	Frame setting		Ethernet(V2.0)
	TCP alive setting		KeepAlive
Open setting			
	Line1		
		Protocol	TCP
		Open mode	Unpassive
		Fixed buffer	Receive
		Fixed buffer step	Have
		Pair open	Pair
		Alive confirm	No
		Local port	Any port (0 - 65535) (registered in EcoWebServerIII setting software)
		Target IP address	- (no set)
		Target port No.	- (no set)
	Line2		
		Protocol	Same as Line1
		Open mode	Same as Line1
		Fixed buffer	Send
		Fixed buffer step	Same as Line1
		Pair open	Same as Line1
		Alive confirm	Same as Line1
		Local port	Same as Line1
		Target IP address	- (no set)
		Target port No.	- (no set)

(b)For internal Ethernet interface
GX Works2/GX Developer settings for internal Ethernet interface.

Item		Contents
IP address setting		
	IP setting	Access by EcoWebServerIII
	Subnet	(ex) 255.255.0.0 Setting condition -Start at 1 -Cannot add 0 amount 1 -Last at 0
	Gateway	IP address of default gateway
Communication code		ASCII
Write in when Run		Allow
MELSOFT direct		No inhibit
No answer to CPU from network		Answer
Open setting		
	Protocol	TCP
	Open mode	Unpassive
	Open type	MC protocol
	Local port	Any port (0 - 65535) (registered in EcoWebServerIII setting software)
	Target IP address	- (no set)

5.5.2. Communicate with EcoWebServerIII by Ethernet/Serial (CH2)

GX Works2/GX Developer settings for Ethernet/Serial interface.

Item		Content
Transfer setting		
	Operation setting	Independent
	Data bits	7
	Parity bits	Yes
	Parity	Even
	Stop bits	1
	Sum check code	Yes
	Write in when Run	Allow
	Change setting	Allow
Communication speed		19200bps
Protocol setting		MC protocol (type 4)
Station No. setting		1 to 31(0 for EcoWebServerIII)

5.6. GOT communication settings

This section explains how to set the GOT when connecting the EcoWebServerIII and GOT with the LAN CH2 port in the EcoWebServerIII's server.

***[1] The EcoWebServerIII reads/writes data to the GOT's virtual device using the microcomputer connection (Ethernet).**
Microcomputer connection (Serial) is not supported.

***[2] The following GOT Series are supported.**
GOT2000 Series (GT27)
GOT1000 Series (GT16/GT15/GT14)
(Note that support is limited to microcomputer connection (Ethernet) compatible GOTs.)

5.6.1. Settings to connect EcoWebServerIII to GOT with Ethernet

(1) For GOT1000 Series (GT16/GT14/GT15)

Set the connection device with the GOT screen creation software GT Designer 3.

Item		Contents
Maker		Others
Model		Microcomputer connection
I/F		Standard I/F (Ethernet): Multi-connection compatible * For GT15, select extended I/F
Driver		Ethernet (microcomputer)
Details settings		
	GOT Net No.	1 (any number)
	GOT station No.	1 (any number)
	GOT IP address	Access by EcoWebServerIII
	Subnet mask	(ex) 255.255.0.0 Setting conditions * Start at 1 * Cannot add 0 amount 1 * Last at 0
	Default gateway	Set when using default gateway
	Ethernet download port No.	Any number
	GOT device communication port No.	Any number (0 - 65535) (This value is registered as GOT port No. by EcoWebServerIII setting software)
	Startup time (sec.)	3
	Send delay time (x10 ms)	0
	32-bit storage order	LH order
	Protocol	TCP/IP
	Type	8
	Interrupt data length	1
	Special interrupt code output	None
	Alive confirm	Disabled
	Alive confirm cycle (sec.)	20

* **Refer to example of setting with GT Designer 3 on next page.**

(2) For GOT2000 Series (GT27)

Set the connection device with the GOT screen creation software GT Designer 3.

Item		Contents
Maker		Others
Model		Microcomputer connection
I/F		Standard I/F (Ethernet): Multi-connection compatible
Driver		Ethernet (microcomputer)
Details settings		
	GOT Net No.	1 (any number)
	GOT station No.	1 (any number)
	GOT IP address	Access by EcoWebServerIII
	Subnet mask	255.255.0.0, etc. Setting conditions * 1 must condition from uppermost bit * Cannot add 0 amount 1 * Last at 0
	Default gateway	Set when using default gateway
	Peripheral S/W communication port No. No.	Any number
	GOT device communication port No.	Any number (0 - 65535) (This value is registered as GOT port No. by EcoWebServerIII setting software)
	Startup time (sec.)	3
	Send delay time (x10 ms)	0
	32-bit storage order	LH order
	Protocol	TCP/IP
	Type	8
	Interrupt data length	1
	Special interrupt code output	None
	Alive confirm	Disabled
	Alive confirm cycle (sec.)	20

* **Refer to example of setting with GT Designer 3 on next page.**

5.7. Data output to PLC/GOT

The following desceibes the range of data output to PLC/GOT.

5.7.1. Double word

(1) Range of accessible devices for commands common to high-performance model QCPU, process CPU, dual CPU, universal model QCPU, QnACPU and LCPU.

Item		Device No.	Data type
Data register	D	D000000 to D12287	Decimal.

(2) Range of accessible devices for commands common to basic model QCPU

Item		Device No.	Data type
Data register	D	D000000 to D011135	Decimal.

(3) Range of accessible devices for commands common to AnA/AnUCPU

Item		Device No.	Data type
Data register	D	D000000 to D008191	Decimal.

(4) Range of accessible devices for commands common to ACPU

Item		Device No.	Data type
Data register	D	D0000 to D1023	Decimal.

(5) Range of accessible devices for commands common to FXCPU

Item		Device No.	Data type
Data register	D	D0000 to D7999	Decimal.

(6) Range of accessible devices for commands common to GT27, GT16, GT15 and GT14

Item		Device No.	Data type
Virtual deice	D	D0020 to D2031, D2036 to D4095	Decimal.

*1 The details of the device No. refer to the manual of PLC.

*2 Data of double word (2 device No. for 1 data).
Last device No. is first device No.+1.

*3 First word is being used as symbol (a multiple of 2).

*4 Please set up the unit and magnification in the upper end (management).

*5 Range of the register value is -2147483648 to 2147483647 (Decimal).

*6 Cumulative value of one cycle can be changed by measuring value and magnification, please confirm in the upper end (management).

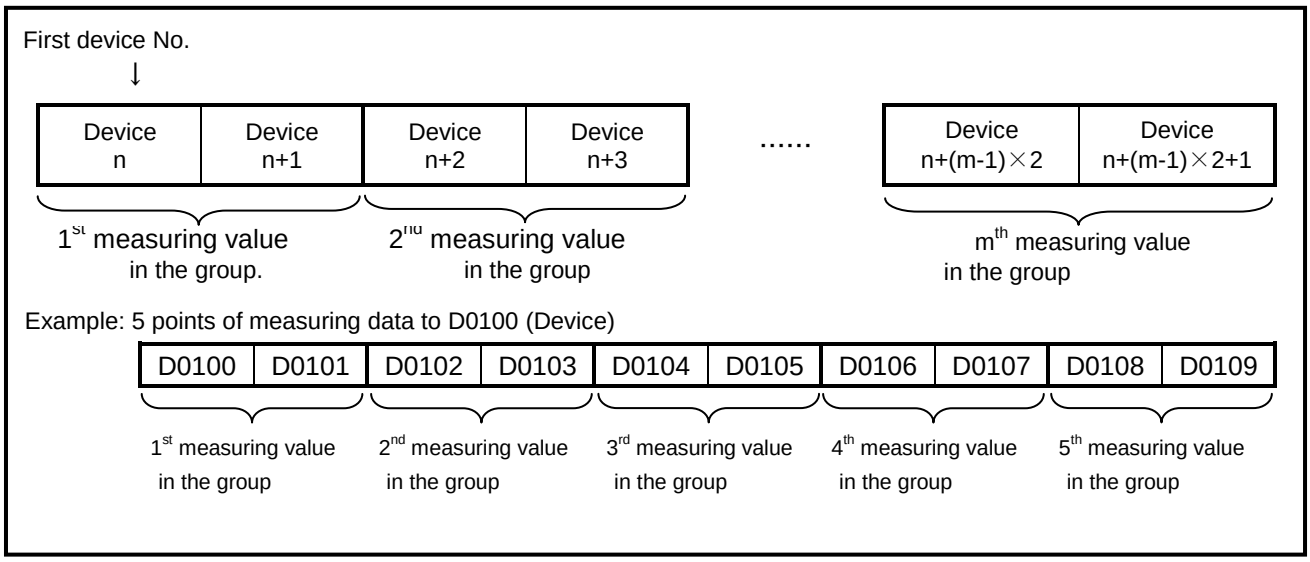
*7 Refer to **Appendix 5.11 Specifications of output to PLC / GOT** for details on each output data type.

5.8. Data output specification to PLC/GOT

The following describes the specification of data output to the PLC/GOT. In addition to output the measuring value, measuring error and updating time can be output to the selected device.
The demand information can also be output to a specified device when using the EcoWebServerIII with demand control function.

5.8.1. Data output

Data output for each measuring item occupy 2 device No.
Device of data output target is registered as [First device No.] in [**4.8.1 Data output settings**].



*1 Range of the data output value is -2147483648 to 2147483647 (Decimal).
Exceeds the upper limit: 7FFFFFFF, below the lower limit: FFFFFFFF

*2 Data with a decimal point will be output as an integer. Please add a decimal in the upper end.

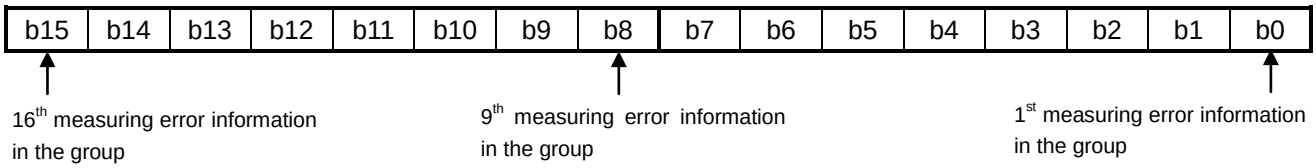
Example	123.456	→ 123456 (1E240h)	Upper end÷1000
	1234.56	→ 123456 (1E240h)	Upper end÷100
	12345.6	→ 123456 (1E240h)	Upper end÷10
	123456	→ 123456 (1E240h)	Upper end do not need calculus
	1234560	→ 1234560 (12D680h)	Upper end do not need calculus

5.8.2. Measuring error information

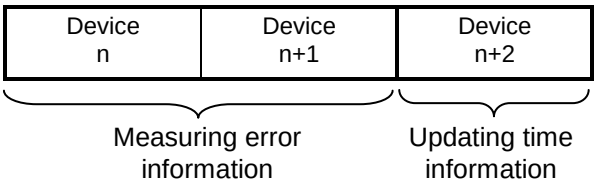
When [Output measuring error information] is selected in the [4.8.1 Data output settings], output measuring output measuring error information (0: normal or 1: abnormal).

*1 [Monitor] in Report mail for measuring error must be selected in Mail notification setting.

Measuring error information or 1 measuring point is used as a bit. (16 measuring points for 1 device, 32 measuring points for 2 devices).



*2 Not use 0: normal output.



5.8.3. Updating time information

[Information of the updating will be appended in the end of the device] is selected in the [4.8.1 Data output settings], updating time information will be appended in the next device of measuring error information.
Updating time is output as Hexadecimal. Range is 00:00(0000h) to 59:59(3B3Bh).
This can be used to determine whether the information is output correctly from EcoWebServerIII.

5.8.4. Outputting demand information (Only with demand control function)

Each time the demand is updated, the following demand information is output to the specified output destination.
The output destination devices are shown below.

* Can be output PLC/GOT is only 1.

n: [First device No.] in [**4.8.2 Data output settings (demand control)**]

Device No.	Item		Output data range	
			(Decimal)	(Hexadecimal)
n	Control device for monitoring		0=Writing / writing incomplete 1= Writing complete	0000h, 0001h
n+1	Healthy		0,1 (Reversed with each write)	0000h, 0001h
n+2	Current time	Year	2012 to 2099	07DCh to 0833h
n+3		Mon.	1 to 12	0001h to 000Ch
n+4		Day(s)	1 to 31	0001h to 001Fh
n+5		Hour(s)	0 to 23	0000h to 0017h
n+6		Minute	0 to 59	0000h to 003Bh
n+7		Sec.	0 to 59	0000h to 003Bh
n+8	Integrated value of consumption	Down	0 to 999,999,999	00000000h to 3B9AC9FFh
n+9		Top		
n+10	Current demand	Down	0 to 9,999,999	00000000h to 0098967h
n+11		Top		
n+12	Predicted demand	Down	0 to 9,999,999	00000000h to 0098967h
n+13		Top		
n+14	Adjusted electrical power	Down	-9,999,999 to 9,999,999	FF676981h to 0098967h
n+15		Top		
n+16	Permissible power	Down	0 to 9,999,999	00000000h to 0098967h
n+17		Top		
n+18	Previous demand	Down	0 to 9,999,999	00000000h to 0098967h
n+19		Top		
n+20	Remaining time		3600 to 10	0E10h to 000Ah
n+21	Alarm		**Refer to next page** [*1]	
n+22	Control status		**Refer to next page** [*2]	
n+23	Target demand value	Down	0 to 9,999,999	00000000h to 000f423fh
n+24		Top		
n+25	VCT ratio	Down	1 to 100,000	00000001h to 000186A0h
n+26		Top		
n+27	Alarm type		1=Limit alarm 2=Fixed alarm	0001h, 0002h
n+28	Integrated value of consumption: Number of decimal digits		0 to 3	0000h to 0003h
n+29	Current demand: Number of decimal digits		1 to 4	0001h to 0004h

*1 Alarm

The alarm data output uses one device.

(1=Occurred, 0=Recovered)

b15	b14	b13	b12	b11	b10	b9	b8	b7	b6	b5	b4	b3	b2	b1	b0

b15 to b7	Not used (0 fixed)
b6	Frequency synchronization error
b5	Error: Demand time limit adjustment by external pulse signal
b4	Battery error
b3	System error
b2	Limit / Fixed
b1	Level 2
b0	Level 1

*2 Control status

The control status data output uses one device.

1=ON (Close) ⋯ Closed,

0=OFF (Open) ⋯ Open

b15	b14	b13	b12	b11	b10	b9	b8	b7	b6	b5	b4	b3	b2	b1	b0

b15	Not used (0 fixed)
b14	Not used (0 fixed)
b13	Not used (0 fixed)
b12	Not used (0 fixed)
b11	Control status (control 12)
b10	Control status (control 11)
b9	Control status (control 10)
b8	Control status (control 9)
b7	Control status (control 8)
b6	Control status (control 7)
b5	Control status (control 6)
b4	Control status (control 5)
b3	Control status (control 4)
b2	Control status (control 3)
b1	Control status (control 2)
b0	Control status (control 1)

5.9. EcoWebServerIII MC protocol server

This section describes EcoWebServerIII MC protocol server.
When using the EcoWebServerIII with demand control function, can read the demand information using the MC protocol communication.

5.9.1. Communications parameter

Communication parameters of EcoWebServerIII MC protocol server is shown in the table below.

Item	Contents
Communication protocol	MCprotocol 3E, 4E frame
	TCP/IP
Updated data code	Binary
Port No.	50001
Receive timeout *2	5 [s]
First device No.	D1000
Data update cycle	10 [s]

*1 Each parameter is fixed and can not be changed.
Please set according to the above parameters by the client side.
*2 The timeout monitoring time of complete reception from the order message reception start.

5.9.2. Local virtual device data output contents (Only with demand control function)

Every demand update, the following demand information is output to the local virtual device specified. The output destination device is shown in the table below.

Device No.	Item		Output data range	
			(Decimal)	(Hexadecimal)
D1000	Control device for monitoring		0=Writing / writing incomplete 1=Writing complete	0000h, 0001h
D1001	Healthy		0, 1 (Reserved with each write)	0000h, 0001h
D1002	Current time	Year	2012 to2099	07DCh to 0833h
D1003		Mon.	1 to 12	0001h to 000Ch
D1004		Day(s)	1 to 31	0001h to 001Fh
D1005		Hour(s)	0 to 23	0000h to 0017h
D1006		Minute	0 to 59	0000h to 003Bh
D1007		Sec.	0 to 59	0000h to 003Bh
D1008	Integrated value of consumption	Down	0～999,999,999	00000000h to 3B9AC9FFh
D1009		Top		
D1010	Current demand	Down	0～9,999,999	00000000h to 0098967h
D1011		Top		
D1012	Predicted demand	Down	0～9,999,999	00000000h to 0098967h
D1013		Top		
D1014	Adjusted electrical power	Down	-9,999,999～9,999,999	FF676981h to 0098967h
D1015		Top		
D1016	Permissible power	Down	0 to 9,999,999	00000000h to 0098967h
D1017		Top		
D1018	Previous demand	Down	0 to 9,999,999	00000000h to 0098967h
D1019		Top		
D1020	Remaining time		3600 to 10	0E10h to 000Ah
D1021	Alarm		**Refer to next page** *1	
D1022	Control status		**Refer to next page** *2	
D1023	Target demand	Down	0 to 999，999	00000000h to 000f423fh
D1024		Top		
D1025	VCT ratio	Down	1 to 100，000	00000001h to 000186A0h
D1026		Top		
D1027	Alarm type		1=Limit alarm 2=Fixed alarm	0001h, 0002h
D1028	Integrated value of consumption: Number of decimaldigits		0 to 3	0000h to 0003h
D1029	Current demand: Number of decimal digits		1 to 4	0001h to 0004h

[Alarm state format]

bit	contents	
b0	Level 1 alarm	0: Restored 1: Occurrence
b1	Level 2 alarm	
b2	Limit/Fixed alarm	
b3	System error (demand control unit)	
b4 to b15	(Not used)	

[Load control state format]

bit	contents	
b0	Control status (control 1)	0: Restored 1: Occurrence
b1	Control status (control 2)	
b2	Control status (control 3)	
b3	Control status (control 4)	
b4	Control status (control 5)	
b5	Control status (control 6)	
b6	Control status (control 7)	
b7	Control status (control 8)	
b8	Control status (control 9)	
b9	Control status (control 10)	
b10	Control status (control 11)	
b11	Control status (control 12)	
b12 to b15	(Not used)	

5.10. List of FTP commands

The following describes FTP (file transfer protocol) commands that are supported by EcoWebServerIII.
The descriptions of the following FTP commands are for data acquisition in EcoWebServerIII from a higher-level device.
(The setting for periodic data transfer from EcoWebServerIII to an FTP server is described in **"4.8.12 FTP server setting"**.)

5.10.1. List of FTP commands

The following FTP commands are supported.
Available commands differ with the login ID.

***1 The default data acquisition login ID and password are "*guest*" and "*user*", respectively, and the default system administration login ID and password are "*ecoV*" and "*ecopass*", respectively.**

***2 Normally, do not use the system administration login ID and password. A change or deletion of a file or folder in the main unit of EcoWebServerIII can cause malfunction.**

Command	Command of FTP client on Windows	Description	Support	
			For file acquisition	For system administration
OPEN	open	FTP connection	○	○
USER	user	(Login ID)	○	○
PASS	—	(Password)	○	○
CWD/XCWD	cd	Change the current directory	○	○
CDUP/XCUP	cd ..	Move to the parent directory	○	○
QUIT	bye close	End FTP connection	○	○
PORT	—	Set a port	○	○
PASV	—	Open the specified port to listen for connection	○	○
TYPE	binary (TYPE I) ascii (TYPE A)	Set a file type	○	○
RETR	get mget	Read out a file Read out files by batch	○	○
STOR	put mput	Write a file Write files by batch	—	○
DELE	del mdelete	Delete a file Delete files by batch	—	○
PWD/XPWD	pwd	Display the current directory	○	○
LIST	dir	Display a list of files	○	○
NLST	ls	Display a list of names	○	○
MKD/XMKD	mkd mkdir	Create the specified directory	—	○
RMD/XRMD	rmd rmdir	Delete the specified directory	—	○

5.10.2. Acquisition of data files by FTP command

(1) Start up the Command Prompt of Windows.
Click [Start] - [Programs] - [Accessories] - [Command Prompt].

```
C:¥Documents and Settings¥User>
```

(2) Move the file to the destination directory (create a folder with Explorer etc.).
Type cd [directory name].
For example, to save a file in [C:¥EcoWebServer¥Data], type as follows to move the file to the appropriate directory.

```
C:¥Documents and Settings¥User>cd c:¥EcoWebServer¥Data
```

(3) Make sure that the prompt shows the appropriate directory name.

```
C:¥EcoWebServer¥Data>
```

(4) Start up the FTP client.
Type ftp and then press the [Enter] key.

```
C:¥EcoWebServer¥Data>ftp
ftp>
```

(5) Connect to EcoWebServerIII.
Type open [IP address of EcoWebServerIII] and then press the [Enter] key.

```
ftp> open 192.168.10.1
```

(6) When the communication is established successfully, EcoWebServerIII gives a response.
Type the data acquisition login ID and then press the [Enter] key.
***1 Do not use the system administration login ID.**

```
ftp> open 192.168.10.1
Connected 192.168.10.1.
220 FTP server ready
User (192.168.10.1:(none)): guest
```

(7) Type the data acquisition password and then press the [Enter] key.

```
User (192.168.10.1:(none)): guest
331 Password.
Password:
```

(8) Display the directory. Type dir and then press the [Enter] key.

```
Password:
230 User guest logged in.
ftp> dir
200 PORT command successful.
150 ASCII data.
11-03-01   04:00PM       <DIR>          ZoomLog
11-03-01   04:00PM       <DIR>          DayLog
11-03-01   04:00PM       <DIR>          DayBak
11-03-01   04:00PM       <DIR>          MonthLog
11-03-01   04:00PM       <DIR>          MonthBak
11-03-01   04:00PM       <DIR>          YearLog
11-03-01   04:00PM       <DIR>          YearBak
11-03-01   04:00PM       <DIR>          VDayLog
11-03-01   04:00PM       <DIR>          VDayBak
11-03-01   04:00PM       <DIR>          VMonthLog
11-03-01   04:00PM       <DIR>          VMonthBak
11-03-01   04:00PM       <DIR>          BDayLog
11-03-01   04:00PM       <DIR>          BDayBak
11-03-01   04:00PM       <DIR>          SystemLog
11-03-01   04:00PM       <DIR>          SystemBak
11-03-01   04:00PM       <DIR>          DlLog
11-03-01   04:00PM       <DIR>          DlBak
226 transfer complete.
ftp: 916 bytes received in 0.11Seconds 8.40Kbytes/sec
ftp>
```

*** Display of the above is an example. Refer to the table on the next page for more information.**

***1 Each directory stores the following data files.**

***2 The Bak directory stores backup data that is used for restoring a corrupted file. Normally, use the Log directory.**

Directory name	Stored file	Remarks
ZoomLog	Zoom data file	
DayLog	Daily data file	
DayBak		For backup
MonthLog	Monthly data file	
MonthBak		For backup
YearLog	Yearly data file	
YearBak		For backup
VDayLog	Virtual (daily) data file	
VDayBak		For backup
VMonthLog	Virtual (monthly) data file	
VMonthBak		For backup
BDayLog	Specific consumption (daily) data file	
BDayBak		For backup
FDayLog	Equipment (daily) data file	
FDayBak		For backup
SystemLog	System log file	
SystemBak		For backup
DILog	Operation history data file	
DIBak		For backup
DmLog	Demand alarm and control history data file*	
DmBak		For backup
DmDayLog	Demand data (daily) file*	
DmDayBak		For backup
DmMonthLog	Demand data (Monthly) file*	
DmMonthBak		For backup
DmYearLog	Demand data (Annual) file*	
DmYearBak		For backup

***Demand data is a file that only models with demand control function creates.**

(9) Move to the directory.

Type cd [directory name] (case-sensitive) and then press the [Enter] key.

(Below is an example of cd MonthLog.)

```
ftp> cd MonthLog
250 CWD command successful.
ftp>
```

(10) Display the directory.

Type dir and then press the [Enter] key.

A list of data files in the [directory name] will be displayed.

```
ftp> dir
200 PORT command successful.
150 ASCII data.
11-03-04   00:00AM                    3 WrStart
11-03-04   00:00AM                    3 WrEnd
11-04-01   00:00AM                12943 1103.csv
      :
11-12-01   00:00AM                14826 1111.csv
12-01-01   00:00AM                12502 1112.csv
12-04-01   00:00AM                16976 1201.csv
226 transfer complete.
ftp: 1025 bytes received in 0.25Seconds 4.10Kbytes/sec
ftp>
```

(11) Acquire a data file.

Type get [file name] and then press the [Enter] key.

To acquire another data file in the same directory, repeat the same operation.

```
ftp> get 1103.csv
200 PORT command successful.
150 ASCII data connection.
226 transfer complete.
ftp: 12502 bytes received in 0.17Seconds 14.69Kbytes/sec
ftp>
```

(12) To acquire a file in another directory, return to the original directory (state of Step (8)).

Type cd .. and then press the [Enter] key.

```
ftp> cd ..
250 CWD command successful.
ftp>
```

By following the same steps as Steps (8) to (11), acquire data files in other directories.

(13) When necessary processes are completed, type bye and then press the [Enter] key.

```
ftp> bye
221 GOOD BYE.

C:¥EcoWebServer¥Data>
```

(14) Type exit and then press the [Enter] key. Windows Command Prompt will be closed.

```
C:¥EcoWebServer¥Data> exit
```

5.11. List of prohibited characters

Prohibited characters on EcoWebServerIII are shown below. The following characters may not be displayed correctly on the browser of EcoWebServerIII.

—～ // － ¢ £ ¬①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮⑯⑰⑱⑲⑳ Ⅰ Ⅱ ⅢⅣ Ⅴ ⅥⅦⅧⅨ Ⅹ ㎜㎝㎞㎎㎏㏄㎡ 〝 № ㍾㍽㍼
℡ ∮ ∑ ∟ ⊿ ⅰ ⅱ ⅲ ⅳ ⅴ ⅵ ⅶ ⅷ ⅸ ⅹ ¬ ¦ ' " ⅰ ⅱ ⅲ ⅳ ⅴ ⅵ ⅶ ⅷ ⅸ ⅹ Ⅰ Ⅱ ⅢⅣ Ⅴ ⅥⅦⅧⅨ Ⅹ ¬ ¦ ' " № ℡

5.12. List of error codes

5.12.1. Terminal connection check

Error code	Description of error	Factor for occurrence of error (details)	Action
45828 (B304)	Abnormal station detected in circuit test	No terminal of the applicable station number is connected.	Check for proper connection of the terminal and disconnection or short-circuit of the transmission line.
45831 (B307)	Abnormal data link of all stations	No terminal of the applicable station number is connected.	
45837 (B30D)	Initial status	No terminal of the applicable station number is connected (at the first connection check).	

5.12.2. Mail sending check

Error code	Description of error	Factor for occurrence of error (details)	Action
-8001	Mail server not set error	SMTP server has not been registered in the setting project	Check the contents of the setting project. And check if the project has been written.
-8002	Mail not set error	Mail notification has not been registered in the setting project	

5.12.3. File automatic transfer check

Error code	Description of error	Factor for occurrence of error (details)	Action
-121	FTP server name incorrect error (connection error)	FTP server name is incorrect	Set the correct FTP server name.
-122	Login error	Login name is wrong	Set the correct login name.
-130	FTP server connection error	It is not possible to connect to the FTP server	Check starting of FTP server and the connection of the cable.
-370	File transfer error	File transfer is not able	Check the FTP server address and the cable.
Others	FTP response code Example) 452: There is not enough storage capacity in the system	There is not enough space on the FTP server	Check the used capacity of the FTP server and ensure the free space.

5.12.4. Air-controller connection check

Error code	Description of error	Factor for occurrence of error (details)	Action
-8005	External device unset error	Air-controller has not been registered in the setting project	Check the contents of setting project and check if written the project.

5.13. Troubleshooting

The following describes what to do when some abnormality or trouble occurs during the use of this software. If an error occurs or a message appears during operation of the OS or an application program, refer to the instruction manual of the OS or application program.

Item	Error details/problems	Check items
CC-Link terminal registration	When the station number of AJ65BT-68TD, AJ65BT-64RD3, or AJ65BT-64AD is set to, for example, 2, no terminal can be registered to station number 3.	Note that the number of occupying stations of AJ65BT-68TD and AJ65BT-64RD3 is 4, and that of AJ65BT-64AD is 2; each terminal successively uses station numbers for the number of its occupying stations. ☞ Refer to **"5.4 List of support terminals (CC-Link communication products)"**.
	AJ65BT-68TD, AJ65BT-64RD3, or AJ65BT-64AD cannot be registered to station number 64.	The number of occupying stations of AJ65BT-68TD and AJ65BT-64RD3 is 4, and that of AJ65BT-64AD is 2; each terminal successively uses station numbers for the number of its occupying stations. Hence, the station number exceeds 64, preventing the registration. ☞ Refer to **"5.4 List of support terminals (CC-Link communication products)"**.
	QJ61BT11N cannot be registered to station number 64. Its number of occupying stations is 1. Why?	Note that the range of station numbers that can be set to QJ61BT11N is 1 to 63.
	Is any setting required for model information?	Use the same setting as that of the terminal. Incorrect setting prevents the collection of measurement data.
CC-Link deletion of terminal	A terminal cannot be deleted. The message "Delete the measuring point before deleting the terminal" appears.	A terminal that is already registered to a measuring point cannot be deleted. Delete the registered appropriate measuring point before deleting the terminal.
CC-Link change of terminal	The model name of a terminal cannot be changed.	The model name of a terminal that is already registered to a measuring point cannot be changed. Delete the registered appropriate measuring point before changing the model name.
	The model name of a terminal cannot be changed even though no measuring point is registered.	The model name cannot be changed for multiple-circuit products (EMU2-RD3-C, EMU2-RD5-C, EMU2-RD7-C, EMU2-RD2-C-4W, EMU2-RD4-C-4W, EMU-C7P4-6-A). Delete the registered terminal and then register the terminal anew.
	The EMU-C7P4-6-A phase wire method cannot be changed.	A registered terminal cannot be changed. Delete the terminal once. Register the terminal again and select the phase wire method.
	If the rated line voltage of the EMU-C7P4-6-A is changed, the rated voltage of the other circuits in the same terminals also changed.	The EMU-C7P4-6-A rated line voltage is common for all circuits.
CC-Link change of terminal	When the line-to-line voltage rating of EMU2-RD2-C-4 or EMU2-RD4-C-4W is changed, the line-to-line voltage rating of other circuits of the same terminal is also changed.	For EMU2-RD2-C-4W and EMU2-RD4-C-4W, the line-to-line voltage rating is common for every two circuits. The line-to-line voltage rating is common between Circuit 1 and Circuit 2 and between Circuit 3 and Circuit 4.
Registration of measuring point	No measuring point can be registered.	No terminal is registered. Register at least one terminal.
	Even when the phase wire method is 1P2W, S-phase current can be selected. Is measurement (data collection) possible?	The measured items that can be actually measured differ with the phase wire method. (The measured items that cannot be measured due to the phase wire method are also displayed on the pull-down menu.) For the phase wire method and measured items, refer to the instruction manual of each terminal.
Deletion of measuring point	A measuring point cannot be deleted. The message "The measuring point is registered to a virtual measuring point, Specific consumption measuring point, equipment, or monitoring and notification settings. Delete the registered items before deleting the measuring point." appears.	A measuring point cannot be registered if it is already registered to a virtual measuring point, Specific consumption measuring point, equipment, or monitoring and notification settings. Delete the registered appropriate virtual measuring point, Specific consumption measuring point, equipment, or monitoring and notification settings.
	A measuring point that is occupied as a contact output cannot be deleted.	It cannot be deleted from the measuring point list screen. On the contact output setting list screen, delete the same number of settings as that of contact output points.

Item	Error details/problems	Check items
Change of measuring point	The terminal name, measured item, scale, the number of digits after the decimal point, device number, data length, or factor of a measuring point cannot be changed.	For a measuring point which is registered to a virtual measuring point, Specific consumption measuring point, equipment, or monitoring and notification settings, the terminal name, measured item, scale, the number of digits after the decimal point, device number, and data length cannot be changed. Delete the registered appropriate virtual measuring point, Specific consumption measuring point, equipment, or monitoring and notification settings.
Registration of group	No group can be registered.	No measuring point is registered. Register at least one measuring point.
	Can a virtual measuring point or a Specific consumption measuring point be registered to a group?	No virtual measuring point or Specific consumption measuring point can be registered to a group.
	Can the same measuring point be registered to different groups?	The same measuring point cannot be registered to multiple groups.
Deletion of group	If a group is deleted, will the registered measuring points be deleted as well?	Even when a group is deleted, the measuring points that are registered to the group will not be deleted. Register the measuring points to a group again.
Virtual measuring point registration	No measuring point can be registered. No measuring point is displayed on the screen for registering an operational expression.	No measuring point is registered of the same type as that of the integrated value or instantaneous value that is selected in the data type of the virtual measuring point. Register a measuring point of the same type.
	Can measuring points of an integrated value and an instantaneous value registered together?	They cannot be registered together to the same virtual measuring point.
	What kind of operational expressions cannot be set?	Settings where the operation results of the constants exceed 11 digits or where the number of characters in the operational expression exceeds 256 are not permitted. ☞Refer to **"4.5.1 Virtual measuring point registration"**.
Deletion of virtual measuring point	A virtual measuring point cannot be deleted. The message "The measuring point is registered to either a Specific consumption measuring point or equipment. Delete the registered items before deleting the virtual measuring point." appears.	A virtual measuring point cannot be registered if it is already registered to a Specific consumption measuring point or equipment. Delete the registered Specific consumption measuring point or equipment.
Specific consumption measuring point registration	No Specific consumption measuring point can be registered. No measuring point (virtual measuring point) can be specified for energy amount or production amount.	No measuring point (virtual measuring point) is registered for the integrated value. The measuring point (virtual measuring point) of an instantaneous value cannot be registered to a Specific consumption measuring point.
	Can a constant value such as area be specified for production amount?	Register a constant value for virtual measuring point to specify for production amount.
Deletion of Specific consumption measuring point	A Specific consumption measuring point cannot be deleted. The message "The measuring point is registered to a monitoring and notification settings. Delete the registered items before deleting the Specific consumption measuring point." appears.	A Specific consumption measuring point that is already registered to a monitoring and notification settings cannot be deleted. Delete the registered appropriate monitoring and notification settings.
Registration of equipment group	No equipment group can be registered.	No equipment is registered. Register at least one measuring point.
	Can the same equipment be registered to different groups?	The same equipment can be registered to multiple groups at the same time.
	What changes if the order of registration of equipment to an equipment group is changed?	The order of display will be the order of display of the list of equipment details on "Measurement graph display screen - Equipment on EcoWebServerIII.
Mail notification	When you paste to copy the subject line and destination, the right-click menu "Paste" can not be used.	Paste by shortcut-keys "Ctrl + V" is enabled.
	Each notification (Upper/lower limit monitoring, Operating status monitoring, Specific consumption target value monitoring, and Energy plan value monitoring) settings window does not open. (Edit button is not enabled.)	Must be set to "set" of [Monitoring] in the [measuring point] setting display.

Item	Error details/problems	Check items
Registration of upper/lower limit monitoring and notification settings	No upper/lower limit monitoring and notification settings can be registered.	No measuring point of the instantaneous value is registered. Upper/lower limit cannot be monitored for the measuring point of an integrated value. Register a measuring point of an instantaneous value, and setting to “set” of [Monitoring] in the [measuring point] setting display.
	Can upper/lower limit be monitored for a measuring point of power factor?	Upper/lower limit can be monitored for power factor because it is a measuring point of an instantaneous value.
	Can upper/lower limit monitoring and notification settings be registered for a virtual measuring point?	Upper/lower limit cannot be monitored for a virtual measuring point.
Registration of operation status monitoring and notification settings	No operation status monitor or notification can be registered.	No operation monitoring point is registered. Register an operation monitoring point (a measuring point of a digital input (input/output) unit) and setting to "set" of [Monitoring] in the [measuring point] setting display.
Registration of Specific consumption target value monitoring and notification settings	No Specific consumption target value monitor or notification can be registered.	No Specific consumption measuring point is registered. Resister the specific consumption measuring point, and setting to “set” of [Monitoring] in the [Specific consumption measuring point] setting display.
Registration of energy planned value monitoring and notification settings	No energy plan value monitor or repo notification rt can be registered.	No measuring point of an integrated value is registered. Resister the measuring point of an integrated value, and setting to “set” of [Monitoring] in the [measuring point] setting display.
	Can an energy plan value be monitored for a virtual measuring point?	An energy plan value cannot be monitored for a virtual measuring point.
EcoWebServerIII error notification	After the time adjustment error occurs, re-set the SNTP server and came to be time adjustment, but does not recover from the error.	In order to recover from the auto time adjustment error, need to reset the EcoWebServerIII.
Contact output setting	Can an "Unregistered" monitoring item be selected or registered as a contact output condition?	It is possible. However, please note that an "Unregistered" item cannot establish a monitoring condition. After an "Unregistered" monitoring ID is registered as a contact output condition, the contact output condition will be updated when monitoring registration settings are made to that monitoring ID.
	Did the contact output setting, but contact is not output.	There is a possibility that the [monitoring notification register] has not been. Separately, contact output of the following is required monitoring notification registration (When mail notification is not required, resister as no notification.). Upper/lower limit monitoring, Operating status monitoring, Specific consumption target value monitoring, and Energy plan value monitoring. ☞ (Refer to [4.8.8 Upper/lower limit notification registration], [4.8.9 Operating status notification registration], [4.8.10 Specific consumption target value notification registration], [4.8.11 Energy plan value notification registration])
	Contact output setting was changed and written to the project, but the contact remains ON (not OFF).	State of the contact ON is continued, when change the setting about the contact and write the project. Turned OFF the contact manually in the test adjustment function before the project is writen. Reset the EcoWebServerIII or the remote I/O unit, when the project is changed and written in the state of contact ON.
IP address setting	"IP address illegal" appears when the EcoWebServerIII IP address setting is input.	Confirm that the client PC's IP address is not duplicated with the IP address set in CH2.
	After the IP address of EcoWebServerIII is changed, communication from a client PC is disabled.	Check the IP address and subnet mask setting of the client PC. (The network portion of the IP address must be the same as that of the main unit of EcoWebServerIII. The host address portion of the IP address must be different from that of the main unit of EcoWebServerIII.) ☞ Refer to **“4.7.1 IP address setting”**.
Connection check	"Not supported" appears when the EMU-B7P4-6-A is connected and the connection is checked.	The EMU-B7P4-6-A input type may be set to "Contact input". Change the setting to "Sensor input" or "Pulse input" on the EMU-B7P4-6-A side.

Item	Error details/problems	Check items
Connection check, write, readout, and verification of project, various maintenance	A connection error is displayed.	The IP address of EcoWebServerIII may be incorrect, or the network may not be connected or configured properly. Check them again.
Time setting	Time goes back to default.	The EcoWebServerIII battery is spent. Please exchange the battery.(model Q6BAT)
Installation	The message "This OS is not supported" appears when installing the setting software and the installation is not completed.	The English version setting software can be installed only in the English version OS. If a tool such as Microsoft AppLocale Utility, which changes the language judgment operation, is installed, the problem on the left might occur. Uninstall the tool in this case.
Setting change Write to project	The setting was changed and written to the project, but the display was not updated.	After changing the setting, close the browser once and reset.
Demand setting	The demand setting was changed and written to the project, but the display was not updated.	The setting is not applied until the current demand time limit ends.
Test and adjustment Mail transfer confirmation	Mail was not sent.	• Check that the SMTP server name is correct, and the LAN is correctly connected between the SMTP server and EcoWebServerIII. • Check that the send source address is registered in the SMTP server. • Check that the send source address is correct, and that it can be sent from the SMTP server. • When using a SMTP server that requires authorization when sending, such as SMPT-Auth or POPbeforeSMTP, check that the settings are correct.
Test and adjustment File automatic transfer confirmation test	The file is not transferred.	• Check that the FTP server name is correct, and that the LAN is correctly connected between the FTP server and EcoWebServerIII. • Check that the user name and password for logging into the FTP server are correct. • Check that the transfer destination folder path is correct, and that writing is possible with the user name set in the EcoWebServerIII.
Energy-saving coordination setting	Coordination with external devices is not possible. (The external device operation does not change even when the demand value is large.)	• Check that the connection destination and external device address are correct, and that the LAN is correctly connected between the external device and EcoWebServerIII. • Confirm that the energy saving monitoring setting (alarm value 1 to 4) is correctly set. • Check that the demand settings (VCT ratio, pulse constant, alarm type, fixed alarm value, etc.) are correct. • Check that the energy-saving operation on the external device side is correctly set.

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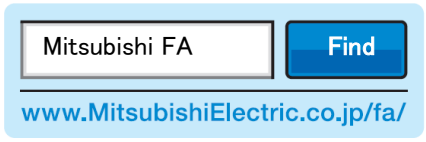

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Telephone/FAX Technical Consultation

Applicable model	Phone/FAX number		Business hours[*1]
Energy saving assistance equipment	Phone	(052) 719-4557	9:00 to 19:00 (Until 17:00 on Fridays)
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